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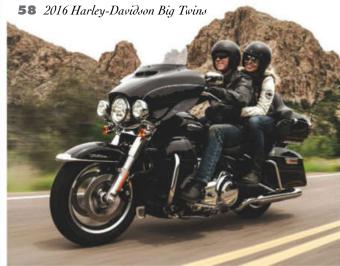
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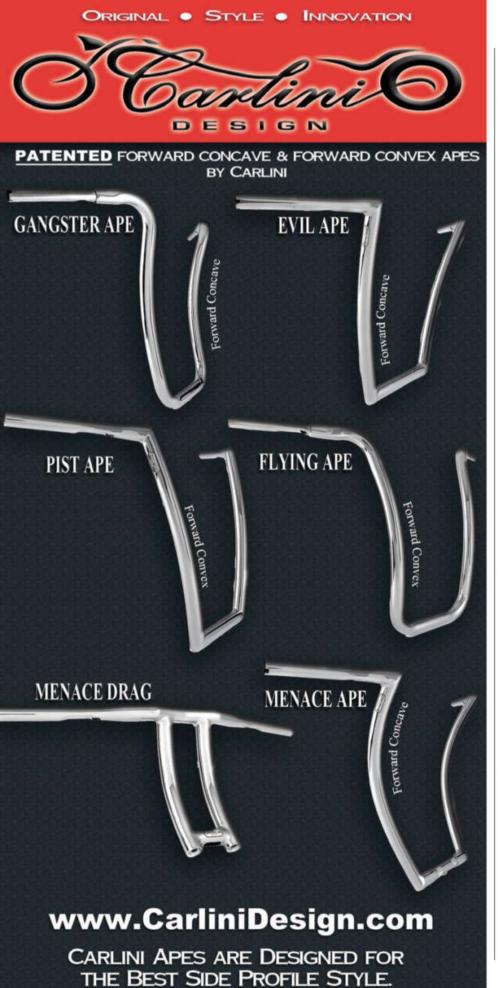






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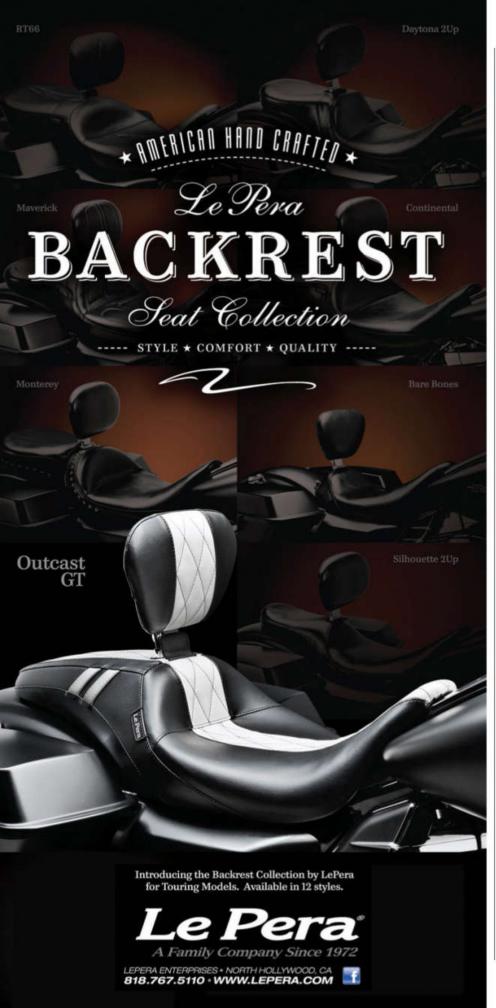


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Old Kickers & New Electric Bikes

MOTORCYCLES HAVE BEEN A HUGE PART OF MY life since the 1970s. All sorts of motorcycles, old or new, fast or slow, big or small, I like just about all of them. Can't say that I've ever understood

the appeal of sky-high apehanger handlebars, nor have I wanted to build or own an extreme chopper or big wheel bagger. But that's just me. We have featured those kinds of bikes, and I can appreciate the talent and hard work to build them, but they are not my thing.

When it comes to spending my own money on motorcycles -and I do seem to spend more than I should — most of it goes to buying or fixing up classic Harleys and Indians. There's something about these old kickstart/handshift motorcycles that really appeals to me. Not sure if it's the fun of the hunt for the older bikes and correct old parts, the romance of the ancient machines, or how much fun they are to cruise around on. Whatever it is, every year I put a few thousand miles on them and feel lucky that I can.

If you also love the old classics, I'd like to invite you to join us - on any year motorcycle — at Wheels Through Time museum for another Motorcycle Kickstart Classic. We have yet to set the date, but we're planning to ride in and around Maggie Valley, North Carolina, sometime in 2016. Plan on late spring or early summer, so it

shouldn't interfere with Motorcycle Cannonball's Race Of The Century ride in September. That cross-country event is for motorcycles 100 years or older, and I plan to ride my 1915 Harley from Atlantic City, New Jersey, to San Diego, California.

Electric Victory

I HAVEN'T SPENT MUCH TIME ON ELECTRIC MOTORCYCLES other than a brief stint aboard Harley's Project LiveWire on the mean streets of New York City. So when Victory's PR guy, Van Mays, offered me a half-day ride on the new electric Victory Empulse TT, I jumped at the chance. I had only a half day to ride it, not enough for a full review (we have one in the

works) but I'd like to share some initial experiences.

First off, yes, it is a mildly reworked Brammo, which Victory purchased and rebranded. Secondly, it is fast, and I mean very fast. It comes on strong right off the line and stays strong as long as you have open road in front of you and a charged battery. And it is virtually silent, which can

> surprise other riders when you pass them. (I said it was fast!) We startled more than a few Harley riders when we passed them on winding Nemo Road outside Sturgis.

The bikes were so quiet many of the riders were not aware we were there until we silently swooped past them. While loud pipes might save lives, the electric motorcycle saved us from speeding tickets when we rode past a policeman somewhat over the speed limit. He didn't even look up as we silently passed his parked patrol car on the side of the road.



When it comes to spending my own money on motorcycles — and I do seem to spend more than I should

Give The Gift That Keeps Giving

FOR MANY OF US, MOTORCYCLING IS A social thing. Some of us like to ride with a few close friends, others enjoy riding with larger groups for charity rides, events and such. But no matter which you prefer, we all have friends that also love to ride.

The holidays are right around the corner, and I'd like to suggest you consider a gift of American Iron Magazine for your riding buddies. A full-year's subscription (13 big issues) doesn't cost much but will be enjoyed by your buddies all year long. And, as

an added bonus, they won't have to mooch your copy any more. You can buy them subscriptions by calling 877/693-3572 or online at AIMag.com.

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Two Wheels & Two Wings

As a rule, whenever i have to travel someplace for work, I check if there's something fun to do in that area. If that pans out, and I have the extra time and cash, I add a day or two to my trip and take a minivacation. In past columns, I've encouraged our readers to do the same. After all, the big expense is, most times, the airfare. An extra night at a hotel and a rental, be it bike or car, aren't usually a deal breaker. In fact, we set up some of the tours in American Iron with that goal in mind. Do you have to travel someplace fun, but it's for work? Plan in an extra day, rent a bike from a local dealer-

ship, and take a mini-tour/vacation in a new place. Of course, these minivacations don't always have to be motorcycle-related. My other passion is aviation, and on a recent work trip, I had an opportunity to combine my two passions.

Last August, I went to Portland, Oregon, to test ride some of the new 2016 Harley-Davidson models. Very nice stuff from The Motor Company this year! We have pics and specs for the two-wheel Big Twins in this issue, with the rest of the fleet in the next one. Several months earlier, I found a place where I could learn to do something I've wanted to try since I was a kid and saw pictures of barnstormers back in the 1920s. I'm talking about wing walking. That's when you get out of the open cockpit of a biplane flying at around 4,000'-4,500' and climb on top of the top wing. After you strap yourself to a support that's up there, the pilot does acrobatics. Very fun



Whenever I have to travel someplace for work, I check if there's something fun to do in that area stuff! After the pilot regains some altitude, you do the same on the left wing.

That special place is the West Coast Spin Doctors in Sequim, Washington, which is about four hours north of Portland. This is the only place I found where you can do this. There's a company in England that does something similar, but you're on the top wing before the plane takes off. Though that's also very cool, I wanted to actually walk on the wings.

While there, I met Jason Lussier, another Harley lover and a great guy who was also going to wing walk that day. Check out Jason's

photo in this issue's Snaps section. Also be sure to check out my three wing walking videos on YouTube. They're called Ultimate Roller Coaster Ride I, II, and III. The first one is of my walk on the top wing, taken by a GoPro camera on the plane's tail. The second is of my time on the left wing by the same camera. The last one was shot from a Tachyon HD camera that I taped to my sunglasses. (It's an excellent camera, by the way.)

The bottom line is, whatever your passions, be sure to fit them in whenever possible. Especially when someone else is picking up part of the tab!

See you on the road.

Chris Maida E∂itor







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Doug Danger Breaks Evel's Record!



IN A TERRIFYING display of courage, motorcycle daredevil Doug Danger pulled off a jump that even Evel Knievel couldn't quite accomplish. Riding Knievel's 1972 XR750, Danger roared down a dirt path between packed campers, under a steel bridge, up an engineered ramp, and over 22 cars set along the main street through the center of the Sturgis Buffalo Chip amphitheater. The back tire

of the 40-year-old Harley bit the edge of the landing ramp and stuck after a quick bounce. Knievel attempted this jump in 1972 after his crew warned that the bike would not attain the speed needed to clear the distance. He insisted on doing the jump, so they built a safety ramp over the last three cars. Knievel bounce-landed on the safety ramp and left defeated. For more information, visit BuffaloChip.com.

H-D Crowns First US Custom Kin

ALEX STEWART, OF YELLOWSTONE HARLEY-DAVIDSON IN BELGRADE, MONTANA, earned bragging rights and a new motorcycle customization title: the first-ever US Custom King. Stewart and his dealership's build team assembled the winning Next Generation Board Track Racer as part of the inaugural Harley-Davidson Custom Kings competition. Nearly 100 US dealerships entered the bike build-off battle featuring the Harley-Davidson Street 750 motorcycle. The entries from finalists in each of the country's seven markets were voted on by their peers at H-D's recent annual dealer meeting. The winning bike will be on display in the main lobby of the Harley-Davidson Museum. For more information about Custom Kings and the Street 750, visit DarkCustom.com.





RSD Honors Rapid City Firefighter

ROLAND SANDS DESIGN (RSD) WANTS TO HONOR the valiant life of a fallen hero from Rapid City, South Dakota. Firefighters from the Black Hills and across the nation are mourning the loss of one of their own after David "Dave" Ruhl was killed battling a wildfire in California. Ruhl leaves behind a wife and two children in Rapid City. In memory of Ruhl, and in the benefit of his family, RSD has started a GoFundMe account to help raise funds for his family. To learn more, or to make a contribution, visit GoFundMe.com/FallenFirefighter. **AIM**



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Three *Ss* to Survival

LATELY, THERE HAVE BEEN REPORTS INDICATING a rise in motorcycle crashes at the national level. Several factors might be responsible for this, among them being the upswing of the economy

that has enabled more people with disposable income to return to motorcycling. Another factor is the rising average age of motorcyclists who might have limited experience in road riding. Perhaps, too, we as a community have become a bit complacent in our driving and riding habits. Regardless of the causes, there are things we can do to help stop this upsurge of accidents.

I'm associated with a nonprofit organization in New York that promotes motorcycle awareness and the benefits of rider education, and this group, like many others across the nation, offers tips on how to minimize motorcycle accidents. The Empire State Motorcycle Safety Education Program (ESMSEP) offers many free seminars to licensed motorcyclists to present them with motorcycle safety information. As much as we always need to watch out for the "other guy," there are many statistics, which indicate that we, as a motorcycling community, are to blame for more

crashes than we'd like to believe. Yes, we need to always be vigilant for other vehicles on the road, but we definitely need to check our own riding skills first, and the accident numbers support that. We are the ones who need to take the first step to reduce the rising accident statistics.

Many motorcycle riders tend to give up too much control to other motorists during situations where we should really be taking control of our own actions. One of the primary roots for ESMSEP presentations is the 3 S_J to Survival, which includes Strategy, Skills, and Safety Gear. Here's a quick break down of each.

Strategy: it's important to have a strategy for riding that includes information about your immediate surroundings. Consider factors such as traffic, road and weather/environmental conditions, and the capabilities of you and your bike so that you can constantly adjust to traffic situations as you ride down the road. Conditioning your brain to recognize and program that information can help prevent a dangerous scenario from actually taking place. Identifying key elements is important,

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We are the ones who need to take the first step to reduce the rising accident statistics

and remember that every situation doesn't require an emergency reaction. Minor precautions such as lane positioning, slight deceleration, lane switching, covering controls, or proper setup for a road condition can influence the outcome of arising traffic issues. In short, reading the road and every bit of information it offers could minimize your risk of an accident.

Skills: although considering the mental processes associated with your riding strategy is a top priority, having the proper skills to make those adjustments is just as important. You need to honestly self-assess your skill level as a rider, keeping in mind that experience doesn't determine your skill level. A person with 20 years of riding experience might have a skill level equal to someone with only one year of experience. I realize this is a tough one to swallow, but proper education can help you become a proficient rider.

Safety Gear: some riders feel that if you're using your safety gear to protect yourself in a crash, there's a strong chance you failed to properly apply the first two Ss. Maybe, maybe not. However, motorcycle riding gear is intended to fit and protect you to the best of its abilities. Nothing more. Today's technology enables us to have riding gear for any type of condition or weather you might encounter on the road. I rarely discuss helmets, knowing that

many riders live in states that don't have mandatory helmet laws. I understand the freedom of choice, but you should make your decision of not wearing a helmet based on accurate information. There are many falsehoods associated with helmet protection, but one thing is for sure: helmets work effectively for the conditions they're designed for. Take the time to find reputable sources to review the correct info before making your decision not to wear one. Head injury is the number-one reason behind motorcycle fatalities, and, yes, a percentage of that even includes helmeted riders.

Taking the steps to study and adhere to the information of the 3 SJ can help you prevent a possible crash or accident when you ride. Yes, we should always keep in mind that the other guy could be at fault, but when it comes to sharing the road, we have a responsibility, first and foremost, to watch out for ourselves. The best advice any rider can use to remain safe on the road is to take back the control of situations and conditions that prevail. Don't let other drivers dictate any possible results. **AIM**



Freedom Road

MOTORCYCLE RIDER EDUCATION IN THE US HAS been virtually unchanged since 1973. Riding schools have been using essentially the same style bikes for the past 40 years, and the curriculum,

although periodically updated, has typically remained true to its 1970s roots. I can't think of one thing that has gone virtually unchanged since then, except maybe the Twinkies snack cake (even though its parent company temporarily suspended operation for a short time, all but throwing our universe out of balance when it comes to junk food).

Don't get me wrong, if it's not broke, don't fix it, and motorcycle safety courses in the US aren't broke. But they might need some fixing to bring them up to date. The basic physical properties of the average streetbike haven't changed, so why shouldn't the training curriculum be the same? Because just about everything else on America's roads has changed. Vehicle design has changed (I'm looking at you, giant SUV owners), roads have become more crowded, drivers are more distracted than ever before (put away those cellphones), and cars have become faster, yet safer, in their overall performance.

It's not that the rider training curriculum needs to be revolutionized, but it does need some positive tweaking. In this day and age, we can measure and

study just about anything. Why did one student excel at motorcycling while another one failed? Now we can address these types of questions to find real answers in the data. So, what's the problem?

The problem, like so many we face, stems from politicians. No breaking news there. Back in the day, the Motorcycle Safety Foundation (MSF), an arm of the motorcycle manufacturing industry, used its deep pockets to influence state lawmakers to endorse rider training at the state level. As states began implementing motorcycle rider education programs, these states needed a certain level of curriculums and standards. So the MSF developed what amounts to a standardized curriculum. Early on, the MSF quietly visited with state legislators, using a team of well-heeled lobbyists to make its pitch. Those lobbyists influenced key elected

officials to alter or implement legislative language in each state, which said, for the most part, that any state-funded program teaching people to ride motorcycles had to use MSF-approved curriculum. Not state approved, MSF approved. The company selling the curriculum to the states became the only organization that could approve it. And just

like that, MSF gained a monopoly over pretty much every state-funded motorcycle rider training program in the country, allowing it to charge whatever it felt was fair.

And for the first 40 years, things went rather smoothly. Then a change came. A new boutique curriculum was developed, and it offered pricey, private nongovernment subsidized courses. The curriculum was the brainchild of a former motorcycle racer who felt his course was better than the MSF program in terms of producing better riders. So he put in bids for a few contracts in states that didn't have the MSF mandate. Consequently and to the shock of everyone involved, he pulled a few state and national contracts from the MSF.

I'm not here to judge the curriculum of any rider education provider. I'm arguing that competition such as this makes us better in terms of the curriculum offered to new riders. From racing to politics to work to business itself, competition always results in improvement over the status quo. I think each and every state that has legislative language handing the rider education program

over to the MSF — and the MSF alone — is doing a disservice to motorcycling. But by expanding the bidding process, states will have better opportunities to improve their riding training programs, which should result in fewer motorcycle accidents — and deaths.

Monopolists get lazy. Noncompetition eventually leads them to gluttony, greed, sloth, wrath, and pride, and, yes, if you're counting, that's five of the seven deadly sins. This country was founded on the principle of free enterprise and competition. Our founding fathers rejected the idea of being forced to live under a monarchy, so America severed its ties to set its own course in history. With that in mind, we should embrace motorcycle education the same way. Upend the monarchy, vote for competition, and, in the process, let's save more than a few lives. **AIM**



I think each and every state ... handing the rider education program over to the MSF is doing a disservice to motorcycling



Three Of A Kind

THERE ARE MORE THAN A FEW MOTORCYCLING families known for having more than one or two generations of riders in the clan. Perhaps the most famous multi generation name in the motorcycle aftermarket is the Ness family, led by bike

builder Arlen, his son Cory, and now grandsons Zack and Max. The female side of the equation includes the late "First Lady of Motorcycling," Motor Maid Dot Robinson, joined by her daughter Betty and granddaughter Dotty. And now, move over, folks, there's a new legacy in the making.

For motorcycling matriarch Gloria Tramontin Struck, last July was a special month. She turned 90 on July 7, right smack dab in the middle of the Motor Maids' 75th Anniversary Convention, which was held in Moncton, New Brunswick. Gloria, a Motor Maid for almost 70 years, has been riding since 1941, some 74 years! She is probably the oldest Motor Maid who still rides on two wheels. No sidecar or three-wheeler, and at just 5' tall, she still rides her 2004 Heritage Softail Classic that shows well over 50,000 miles on its odometer. Her sidekick/riding partner, daughter Lori Di Silva, pilots an Electra Glide Ultra Classic. The pair has ridden cross-country several times, usually starting from their

hometown of Clifton, New Jersey, and they're regulars at many of the large rallies, including Daytona Bike Week and Sturgis. Gloria has ridden – in any weather – to Daytona for Bike Week since 1952. She's even been known to shovel snow from her driveway to get her bike onto the street!

Last summer, to celebrate Gloria's 89th birthday, the pair rode the 1,700 miles to Sturgis — again. Gloria is proud to say that they never trailer their bikes. These two don't mess around ... they ride!

Joining Gloria and Lori on her 90th birthday ride, and making it even more special, was Lori's 25-year-old daughter, Kathy DiSilva. She rode her own bike, of course. Kathy had wanted to ride for years and, without anyone's knowledge, she took and passed the Motorcycle Safety Course from the Motorcycle Safety Foundation with flying colors. Kathy has been around motorcycles her whole life, includ-

ing riding on the back seat of her mom's bike a few times. When she was 12 years old she rode with Lori to the 2003 Motor Maids Convention at Chico, California. That year Lori's son, 15-year-old Gary, was a passenger on his dad's bike, making the three-week trip a true family affair.

Kathy bought her bike, a beautiful red used 2004 Harley-Davidson 883 Sportster, on a Tuesday. She picked

it up the next day and rode home through rush hour traffic. The following Saturday morning, with her mother and grandmother leading the way, the trio left for the 750-mile ride to New Brunswick. Lori was a bit freaked out about how fast this all came about, and being a protective mom, she suggested they keep the route interstate-free, riding back roads all the way to Canada.

The trip was fun for the three of them. Kathy's riding skills improved with every mile, and she rode with such confidence that they decided to take the faster interstate route for the ride home to New Jersey.

I can only imagine how proud Gloria and Lori felt when they arrived in Moncton for the convention. Gloria always says that motorcycling makes the best memories. What a beautiful memory for the three of them.

They made plans to continue Gloria's 90th year celebration with a ride to Sturgis. Armed with confidence and miles under her wheels, Kathy couldn't wait. Lori graciously offered to drive the chase car that contained their lug-

gage, allowing Kathy to ride alongside her grandmother. As we all know, riding with others can be trying, especially if everyone has different priorities. While Gloria is known for her gas-and-go NASCAR-style pit stops, Kathy told me she likes to include some social media downtime with her friends during those refueling sessions. Nonetheless, their ride was fun, and once she hit the road in the morning (a little later than Gloria would have liked!), Kathy rode like a pro. She enjoyed every mile, and she had no idea it would be such a great adventure.

It was at one gas stop during the ride home that the trio realized that each of them was 25 years old when they got their first Harley-Davidson. They certainly have a bond now and hopefully make more memories to last until Daytona's coming 75th anniversary. Hmm, maybe Kathy can help grandma shovel the driveway this time. **AIM**



Move over, folks, there's a new legacy in the making



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LETTERS

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SPREADING THE TOURING LOVE Believe it or not, it took my wife four months to convince me to trade in my 2002 FLSTC for this 2010 FLHTC in March of 2010. I just completed my third trip to Sturgis (I go every five years) and the second on this bike. It now has over 64,000 miles and is mostly stock. This past time I took two friends for their first trip, and they enjoyed the long haul, a round trip of 3,500 miles. Not the longest trip, but one we will never forget. This photo was taken as we were entering Monument Valley, Arizona, on US Highway 163. Other places we rested or visited included Flagstaff, Arizona, Moab, Utah, Rocky Mountain National Park, Estes Park, almost everywhere in the Black Hills, Beartooth Highway, Yellowstone, and Zion National Park. We are already planning our next trip for the 80th Sturgis Rally in 2020.

MITCHELL HEWETT Ojai, CA

HISTORY LESSON Dain Gingerelli's article about the Softail Slim (#326) was well-written and informative when writing about the bike; not so much when he dipped into WWII history. He tells us that George Patton chased Erwin Rommel across North Africa. As you know, America only entered WWII in 1941. Patton landed with a small force in North Africa in

November 1942 to assist the British in Operation Torch, and did engage some of Rommel's forces there. However, the man who famously chased Rommel across North Africa was Bernard Montgomery with the British 8th Army, following his monumental victory at El Alamein in Egypt. General Patton, of course, went on to do an amazing job of sweeping across

We welcome letters on any subject, whether we agree with the writers or not. Electronic letters, both with and without photos, can be e-mailed to Letters@AmericanIronMag.com. Photos should be high-resolution, JPEG images (at least 300 dpi at 4" x 6"). Please also include your name, address, and a brief description of each photo. And although we reserve the right to edit, shorten, or change your letters so they make no sense at all, we do promise not to mess with your images. That means no phony mustaches, tutus, etc. (However, we may slip an issue of *American Iron Magazine* into the photo somewhere.)



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WE CARE

Russ was inducted into the Sturgis Motorcycle Hall of Fame, the only attorney ever to receive this honor. His commitment to the motorcycle community resulted in "BAM" (Breakdown Assistance for Motorcyclists), a FREE nationwide volunteer program of over 2,000,000 riders helping riders everywhere in the U.S. We go the extra mile for our clients and our friends. Our business model is built on relationships and

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I recommend Russ Brown Motorcycle Attorneys highly as they were fast and efficient when I needed them most. They fully appreciate riders' needs as they ride and understood my situation fully. I have no regrets and am very happy with the outcome. When the unthinkable happens, it's good to have them on your side. I wouldn't consider anyone else, neither should you.

Rick Rademacher

western Europe with his 3rd Army after he landed in Normandy in June 1944.

> **PAUL BROPHY** Waterloo, ON

HAPPY RETIREMENT, CHARLIE!

I'd like to wish one of my riding buddies, Charlie Paull, of Atkinson, New

thought about (the ABS issue, etc). With that info, I decided to stick with a factory-made unit. In a week's time, I have gone several hundred miles without pain for the first time in many years. This gimp has a new lease on his in-the-wind time! Many thanks to all you folks at AIM. Now, can we have more trike articles? **BILL CARPENTER**

Via Internet

RICK FAIRLESS

Great article in AIM about your mom. Rick. I'm a retired trooper, and I stopped a lady that was about 80 years old one night. She had just been to her mother's grave. My mother had just passed away and I asked this lady if she ever quit missing her mom. She

said no. I'm glad you know you will see your mom again, as I will see mine. God bless you, sir.

GEORGE RANDOLPH

Via Internet

Hey George, that's a very cool story. I'm sure that lady was right, you and I will never stop missing our mothers. Thanks for reading my article in American Iron Magazine and thanks for taking the time to send me a message! - RF

STOP TRASHING HARLEY! I

wrote last month concerning Donny Peterson's article comparing Victory to Harley, and now there's another three full pages on how much better Victory is than Harley. We get it, Donny, you love Victorys! I believe one article could have covered the subject. But no, it is going to be at least three articles (nine full pages of trashing) of telling us — "people who love Harley-Davidsons" — how much better Victory is than Harley. Buzz, you had better get a clue, a very high percentage of your readers own Harleys. Don't get me wrong, information is good, competition is good, and it drives product innovation, and improves value. I appreciate the information that Donny provides, however, I believe one article could have covered the subject.



Hampshire, a happy retirement. As you can see, he's enjoying the good life on his 2010 Ultra Classic at a must-see location if you visit New Hampshire: the Kancamagus highway.

H-D LEN

Sandown, NH

BACK IN THE WIND Due to increasing medical problems (have rods in my neck and back due to a bad rac-



ing crash in 2005, and the arthritis in my knees has gotten to the point where a 100-plus-mile ride isn't enjoyable anymore), riding was becoming more painful, and I had been contemplating a trike conversion for some time now. With a strike of perfect timing, out came John Frank's Trike Kits article (#326). The article brought up several good points, one which I had never



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In addition, most, if not all, of your parts advertisers, make parts for Harleys. Why are there not more Victory parts offered? Simply because Victory has limited production, limited models, and a limited dealership network (that equals low volume). While on the subject, why during the depression did most of the motorcycle manufactures in America go out of business? They had limited production, limited models, and limited dealers. When the [poo] hits the fan again, Harley will survive because of the diversification of its product line and an unmatched dealer system that Victory can only dream of. I'll continue to buy H-D because history proves they will still be around in the good and bad times. Victory to date, along with Indian, has as yet not been able take the major steps to prevent them from being victims in the next big down turn for the very same reasons so many failed before them.

I hope this will be the last of trashing H-D. If not, then you should consider a mag dedicated to "people who love Victorys" and see how well that sells.

JOHN JETT

Flowery Branch, GA

RAGING IN SINGLE FILE My Sportster bobber is finally finished, but having lots of problems (lines at the



DMV to inspect and register it). I should be on the road soon. Raging Fury in Clinton, Connecticut, built the bike, and we're standing with it here. Thanks, Rick!

RICHARD FRASER

Via Internet

I SWITCHED TO INDIAN! My hat is off to Donny Peterson for his recent articles on Victory motorcycles. Like Donny, I have owned and ridden only Harley-Davidsons for over 30 years. I



have also owned and operated a motorcycle repair and custom shop, specializing in Harley-Davidson, for the last 17 years. Until recently, I never gave Victory a second look. For the most part, I didn't like their styling, so I never gave any consideration to Victory engineering or quality of construction. I prefer the classic look of a Road King to anything that Victory offers.

When I heard that Polaris had acquired Indian, I became very interested. When I saw the first photos of the new Indian, I knew there was one in my future. For the next year, I followed every article and review I could find on the new Indian. There were no bad reviews. I also began to quiz Victory owners about their motorcycles. The word I heard most often from the Victory people was "bulletproof." I did not find an unhappy Victory owner. In December 2014, I called the closest Indian dealership, which is 500 miles away in Calgary, Alberta and ordered a new Indian Chief Classic sight unseen. The Chief was shipped to my shop in Victoria, British Columbia, in January 2015, and I finally got to see the new Indian for the first time in person. I was not disappointed! I now have just over 5,000 miles on the Chief, and the more I ride it, the more I like it. It is well engineered, well-built, and a pleasure to ride. I hope Donny gets as much enjoyment from his new Victory.

> TED GORDON Victoria, BC

A FANTASTIC MOTORCYCLE! I

am passionate about bikes and I am member of a riding group in Piraci-



caba. We do tours in São Paulo State every Wednesday and Saturday. Besides the bike ride, we seek to learn the city's culture and share a good chat with friends. My bike is a Harley-Davidson VRS Night Rod with Revolution engine. This is a fantastic motorcycle!

CARLOS CORROCHER

Piracicaba City, Brazil

GRAMMY ON A HARLEY I started riding 20 years ago, three years after my youngest graduated high school. I'd

tour was planned. I rented a 2015 Harley Road King at Chester's H-D of Reno, which was the final



piece that allowed us to explore the great roads and magnificent sights of northern Nevada, northern California,



just turned 51. My first bike was a 1995 Sportster 1200 and for the next nine years I worked my way up to a 2004 Road King. I've had my picture taken on each bike as soon as I finished making it my own. Why it took so long on this one, I'll never know. When I did finally get to it, Duke insisted on being in the photo.

He sat down and would not move. He left us three weeks later. Now the next question is, how much longer do I ride? I am a grandmother after all!

MARYBETH VAN DINE

Via Internet

PLAN B When our original Phoenix motorcycle tour Plan A was cancelled, my friend Ed Lawson and I immedi-

ately implemented tour Plan B. With me flying from Michigan to Reno, Nevada, (Ed's home town) the road and southern Oregon. Some 1,800 miles and seven touring days included stops at Lassen Volcano National Park, California, Crater Lake National Park, Oregon, the Redwoods of California,



US Highway 1, San Francisco, and Yosemite National Park. They were the highlights of the adventure. The last day included touring around the Lake Tahoe area. One week later, the rental bike was returned, and then Ed and I returned to our respective homes to reflect on our splendid journey. Ed and I both agree: always have a Plan B ready, just in case it's needed.

TOM CRAWFORD

Durand, MI

AIM



MODERN STORAGE **STRATEGIES**

Newer bikes need different protection

INTER STORAGE OF MOTORCYCLES IS one of those perennial topics. Technology has advanced, more motorcycles have liquid cooling, and sophisticated alarm systems have specific procedures that must be followed when the

motorcycle is being stored during winter. Some of the materials used in motorcycle storage have gotten better, and I even have a new tip to share with you, so it's time to update an article I wrote several years ago.

The Fuel System

PREPARING THE FUEL SYSTEM FOR STORAGE STILL REQUIRES the use of a fuel-stabilizing additive. However, modern fuel-injection systems require a product that will be compatible with the oxygen sensors in the exhaust system and catalyst mufflers. Harley-Davidson has a product called Ethanol Guard Fuel Stabilizer (#91600001), which is compatible with carburetors and fuel injectors. Another well-known fuel stabilizer is Sta-Bil, which is made by The Gold Eagle Company in Chicago.

Using a fuel stabilizer will make the spring start-up a lot simpler.



Preparing the fuel system for storage is one of the easier tasks in the storage procedure. Carry a small bottle of fuel stabilizer with you as you go for the last ride of the season. Ride far enough to get the entire bike up to operating temperature. Then stop at the gas station closest to your home, add the fuel stabilizer, and top off the fuel tank. The makers of both Sta-Bil and Harley Ethanol Guard recommend 1 fluid ounce of stabilizer per 2-1/2 gallons of fuel. Now it's time to go home and change the lubricants in your bike. Riding home with the additive in the tank accomplishes two things. First, it allows the treated fuel to flow through the fuel pump (or petcock), fuel lines, and carburetor or injectors. Second, it creates a small empty space at the top of the fuel tank to allow for the fuel's expansion if there's a warm spell during the time the bike is in storage. And, yes, you want to store the bike with a full tank of gas to minimize condensation, and the corrosion it causes, inside the tank.

If you ride a carbureted bike, be sure to turn the fuel petcock off and run the engine until it stalls from lack of fuel once back home. This step empties the float chamber on the carburetor, so you don't end up with evaporating fuel leaving any residue behind.

Oil & Filter Change

MOTORCYCLE MANUFACTURERS AND mechanics agree that the engine oil and filter should be changed prior putting the motorcycle in storage. This isn't a devious plot to sell more oil and filters. The reason for the prestorage oil change is based in chemistry. The hydrocarbons in gasoline combine with oxygen from the air when burned in the combustion chambers. The products of combustion include water molecules, carbon monox-





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ide, and carbon dioxide. Some of the water combines with some of the carbon dioxide to form carbonic acid. Furthermore, most of the air entering the engine during each intake stroke is nitrogen. The temperature and pressure in each combustion chamber result in the creation of oxides of nitrogen. These oxides of nitrogen can combine with molecules of water to form nitrous acid and nitric acid. Although most of these byproducts of combustion leave the engine by way of the exhaust system, small quantities of water and acid find their way into the crankcase because of blowby past the piston rings. Do your motorcycle's engine a favor by changing the oil as part of the storage procedure.

While you're at it, you might as well change the primary chaincase lubricant and transmission fluid while you have the drain pan under the bike. Then you'll have all of the fluids fresh for the first ride of spring.

Clean Machine

ANOTHER SUBJECT MANUFACTURERS and mechanics agree on is the need to clean the motorcycle prior to storage. Dirt retains moisture and moisture leads to corrosion. Get your bike as clean as possible. Remove the seat and clean beneath it. You may be surprised at the amount of dust and dirt on the bottom of the seat and the top of the rear fender. Be sure to thoroughly dry the bike to remove all moisture. You may want to blow air into the places you can't reach.

Remove the saddlebags and clean them. If your motorcycle has leather saddlebags, use a leather conditioner/preservative. Rodents have been known to chew on leather saddlebags. Mothballs are regarded as a rodent repellant, so place a few mothballs in a partially open food storage bag in each saddlebag to deter their use as a mouse motel.

Liquid Cooled?

LIQUID COOLING DESERVES SOME ATTENtion during preparation for storage. Check the coolant level and condition if you ride a Twin-Cooled Touring model, V-Rod, or Street 500 or 750. Contrary to what some people think, the coolant/antifreeze blend doesn't last for the life of the bike. Chemicals in the liquid optimize heat transfer, inhibit corrosion, and help lubricate the coolant



Lubricate and protect the engine's cylinder walls with fogging oil.

pump. These chemicals break down with age and heat cycling and need to be replaced at the intervals specified in the bike's owner's manual.

Internal Protection

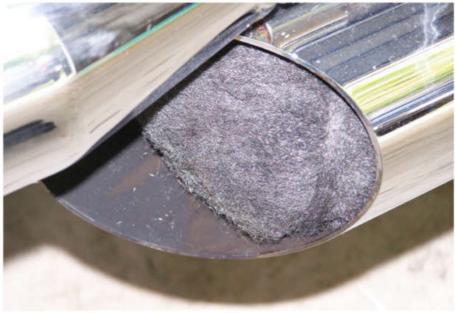
DECADES AGO, RIDERS WOULD PREPARE the inside of their bike's engine by squirting oil into the carburetor throat while the engine was running at a fast idle. Blue smoke would come out of each muffler just before the engine stalled as the spark plugs became oil fouled. This technique meant the intake valves and cylinder walls were covered with a film of oil that would prevent corrosion during storage. I don't recommend using

this method on a modern bike because of sensors in the intake air tract. A more modern way to protect cylinder walls and piston rings is to remove the spark plugs, spray fogging oil into each cylinder, put the spark plugs back in, ground the spark plug wires, and then crank the engine over a few revolutions before reconnecting the spark plug wires.

Make sure the fogging oil won't contaminate the oxygen sensors or muffler catalysts. A spokesman for The Gold Eagle Company assured me that Gold Eagle's fogging oil wouldn't contaminate oxygen sensors.

Exhaust Tips

BACK IN THE DAYS WHEN I RODE A METRIC bike, it was common practice to spray the insides of both mufflers with a wellknown aerosol lubricant to displace moisture and prevent corrosion. Last year, I did a semiscientific experiment to compare fogging oil with an aerosol lubricant. I placed a piece of cold rolled steel against an interior garage wall, then sprayed the left half with fogging oil and the right half with an aerosol lubricant. Two days later, I noticed the fogging oil stayed where I sprayed it while the aerosol lubricant had partially evaporated and partially flowed down to the floor. As a result of this experiment, I now use fogging oil to help protect mufflers from corroding from the inside out. Again, make sure anything you spray



Rodents may spend the winter inside mufflers unless steel wool blocks their entrance.



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into the exhaust system won't contaminate sensors or any catalyst converter.

Rodents have also been known to take up residence in mufflers. Back in 1974, I stuffed rags into muffler outlets. The mice used the rags to make their nests more comfortable. Since then, I've used steel wool in the mufflers, and the mice leave it alone. Go figure.

Security & Batteries

SECURITY SYSTEMS ARE ANOTHER modern development that must be accommodated during storage. If you store the motorcycle with the battery connected and the security system armed, you must connect a battery tender or another type of smart charger with sufficient current capacity to operate the security system and keep the battery fully charged. If the battery is going to be removed from a motorcycle that's equipped with the smart siren, keep the security system fob nearby and follow the step-by-step procedure in the security system instructions when disconnecting the battery. This is because the smart siren has its own built-in backup battery that sounds the siren if the bike's battery is disconnected. The security system interprets removal of the bike's battery as an attempt to disable the alarm.

Battery care during storage is a lot simpler on bikes without a security system. You have the choice of leaving the battery in the bike and connecting a battery tender or another smart charger or removing the battery and periodically charging it while the bike is in storage. I choose the first option because it's easier, and I can look at the indicator LED on the charger each time I walk through the garage on my way out to remove snow from the driveway.

Location & Protection

WHERE WILL YOU STORE YOUR BIKE? Many riders put their bike in a corner of the garage until spring. If so, choose the corner carefully. Keep the bike away from harsh chemicals like salt, fertilizer, or weed killer. You don't want dust from any of these products near your bike. Also, keep the bike away from electric motors that may create ozone. For example, I keep my bike in the corner of my garage that's diagonally across from the bench grinder, drill press, and air compressor. Motors can create ozone,



Check the coolant level and condition on liquid-cooled bikes like this Twin-Cooled Touring model.

and ozone degrades rubber. Avoid premature aging of hoses, drive belt, and tires by keeping the bike away from any potential ozone sources.

Do you want to elevate your bike while it's in storage? Putting it on a lift or stand can take the weight off the tires, suspension, and wheel bearings. The more important question may be whether you can elevate your bike safely while it's in storage.

Now it's time to cover your bike for the winter. Be nice to your bike and buy a proper cover. Don't use a bed sheet or a well-used shower curtain. A proper cover is made from a fabric that won't damage the bike's finish and will allow for a bit of air circulation to prevent condensation. Some covers are intended for indoor use only, while others can be used indoors or outdoors. Many covers come in small, medium, or large sizes while others may be made for a specific model.

If you're covering a touring bike with multiple radio antennas, make sure you have a cover that provides access for the antennas. Some aftermarket covers don't have holes or slots to accommodate antennas. Here's a trick I learned from car collectors. Get some iron-on denim patches from a fabric shop or discount department store after determining that your bike's cover will withstand the heat of an iron. After carefully measuring where you need the hole (s), use a hollow punch to make a hole in the iron-on patch. Then cut a small hole in the bike cover and align the hole in the iron-on patch with the hole in the cover and iron the patch on. The hole in the cover allows it to fit around the antenna while the patch prevents the fabric from tearing.

Conclusion

THERE'S ONE MORE THING TO DO NOW that your bike is in hibernation: read the fine print in your motorcycle insurance policy to make sure the comprehensive coverage is in effect during the winter months. You need comprehensive coverage in case of fire, theft, vandalism, or other unwanted occurrences. **AIM**



Cover your bike with a soft fabric cover that provides a bit of air circulation to avoid condensation and corrosion.



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1957 to 1985 Ironhead **Sportsters**

Part I: Primary chains, oiling systems, engine specs, and ignitions

LL IRONHEAD AND EVOLUTION SPORTSTERS from 1957 to present have a unit construction powerplant. More correctly, the engine, clutch, and transmission are unit construction, which means that these three major drivetrain components fit into the same crankcases. All Big Twin motorcycles have the engine, clutch, and transmission in separate casings. Unit construction provides rigidity that the Big Twins could only wish for. This results in the Sportster having better handling and parts longevity because of reduced flexing.

The Drive Chain

THE SPORTSTER PRIMARY CHAIN SITS INSIDE THE LEFT SIDE primary compartment. More than one reference book says that the Sportster primary drive chain is duplex (two rows) in 1957 and triplex (three rows from 1958 to 1985). The flathead (side valve) 45 primary chain is duplex, but the 45 is neither Sportster nor Big Twin oriented. However, the Sportster's predecessor, the 1952-56 K Model flatheads (side valve), use a triplex primary chain. The Sportster evolved directly from the K Models. The overhead valve (OHV) Sportster's triplex primary chain (#40005-57) has a 1957 part number suffix indicating first use in 1957. I think all 1957 Sportsters used a triplex primary chain.

The primary chain connects the engine sprocket to the clutch hub sprocket and transfers power from the engine to the clutch and into the transmission. The 1957-85 single-row,

530 rear chain connects the transmission sprocket to the rear wheel sprocket to transfer power to the rear wheel and, thus, the tire patch that meets the pave-

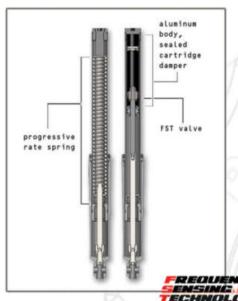
The Four Strokes

THE ROTATING FLYWHEELS IN THE Sportster engine, as with all four-stroke motors, push the pistons up and pull them down the cylinders four times to complete a single combustion cycle. Each of these four strokes requires 180 degrees of crankshaft rotation. The pistons move up and down their respective strokes in tandem with each other. Each piston travels up its respective cylinder at the same time and moves down together. However, each cylinder is on a different stroke than its mating cylinder. If the front cylinder piston is beginning its cycle on its downward intake stroke, the rear cylinder piston will be on its downward power stroke. As the front piston moves up its compression stroke, the rear piston is on its upward exhaust stroke. The front piston then descends on its power stroke, while the rear piston travels downwards on its intake stroke, beginning its cycle. Finally, as the front piston ascends on its exhaust stroke, finishing its cycle, the rear piston is on its upwards compression stroke.

This cycle of four 180-degree strokes requires 720 degrees of crankshaft rotation to complete before starting over on a new cycle. Furthermore, the rotating flywheels pull the front cylinder piston down the cylinder bore via the connecting rods on the intake stroke to draw in a fresh charge of air and gasoline. The rear cylinder piston is on its power stroke at this time. The piston actuated by the now ascending connecting rods, push up each bore on the compression stroke, squeezing the air and gas mixture in the cylinder into a smaller space, the combustion chamber. The rear cylinder

The Sportster triplex (three row) primary chain sits inside the left side primary compartment. Though more than one reference book says the Sportster primary drive chain is duplex (two rows) in 1957 and triplex from 1958 to 1985, I think all 1957 Sportsters used a triplex primary chain.





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piston is on its exhaust stroke. The spark plug ignites the mixture, creating heat that expands the gases in the combustion chamber, driving the piston down the cylinder bore on the power stroke. This stroke forcefully rotates the flywheels to transfer power back to the rear wheel via the engine's sprocket shaft and through the entire drivetrain to move the bike forward. The rear cylinder piston is now on its initial intake stroke.

The last front cylinder stroke is the exhaust one, whereby the rising piston will force the burned gases out of the cylinder and into the exhaust pipe, thereby completing one 720-degree rotation cycle of this four-stroke engine. The rear cylinder piston is on its compression stroke. Thus, the engine must rotate two complete 360-degree circles, so to speak, to complete a full cycle of the four strokes with each stroke representing 180 degrees of crank rotation.

Oiling Systems

IRONHEADS HAVE A DRY SUMP ENGINE, which means there's a return side to the oil pump and the oil is stored externally in a reservoir (oil tank) and not in the bottom of the engine. Most H-D engines

Each of the four Sportster camshafts have one egg-shaped lobe (arrow), which opens and closes the valve it controls via the valvetrain.



ENGINE DISPLACEMENTS

ENGINES PRODUCED FROM 1957 TO EARLY 1971 HAVE A CYLINDER bore diameter of 3" (76.2mm) and a 3 8125" (96.8mm) stroke, which gives the engine a displacement of 883cc. commonly referred to as 900cc. or

the engine a displacement of 883cc, commonly referred to as 900cc, or 53.9 cubic inches (54). Engines produced from late 1971 to 1985 have a cylinder bore diameter of 3.18" (81mm), which increases the engine displacement from 883cc to 997.5cc (1000cc), or 60.9 cubic inches (61). Harley develops in half years. Therefore, many new innovations for the following year occur in the last half of the previous year.

have an oil pump with a feed side and a return side that pressurizes the oil for efficient delivery and return. A wet sump engine, like what is in most cars, stores its oil in the engine's crankcase and does not require a return side to the feed-only oil pump. Harley calls this a recirculating engine oiling system.

The 1957-76 Ironhead Sportster engine uses a gear-driven oil pump, which provides moderate pressure and volume. The 1977-85 Ironhead Sportster engine uses a gerotor-driven oil pump, which provides high pressure and high volume. Gears have straight cut teeth while gerotors have rounded nubs. The primary chain and transmission are lubricated by their own oil bath, which is separate from the engine.

The dry clutch setup, used in 1957-70 Ironheads, is kept separate from the oil in the primary via seals and gaskets. The wet clutch setup, used in 1971-85 Ironheads, uses the primary/transmission oil as a coolant.

1957-85 Engines

ALL IRONHEAD SPORTSTER ENGINES have cast iron cylinders and heads, with the exception being the 1983-84

VIN LOCATION

VEHICLE IDENTIFICATION numbers (VIN) are located on the left engine crankcase, just below where the cylinders meet, on all 1957-69 Harley-Davidsons, These bikes are registered by this engine case VIN number. All 1970-85 Harley-Davidsons are registered by a frame neck VIN number. The engine number. which is now on the right engine crankcase, becomes an engine identification number. On Sportsters, this engine identification number is located on an engine boss at the top of the case, at the foot of the two intake pushrod tubes. That is, except for some 1970 models, which may have this number stamped towards the front of the right crankcase.

XR-1000, which has aluminium heads and other progressive mechanical features. The XR-1000 is one of Willy G's design ventures.

The combustion chambers are hemispherical (inverted dome), as are the angular, domed pistons. This configuration is commonly referred to as a *hemi-head*. The engine is also an overhead valve (OHV) configuration. Each head supports an intake valve and an exhaust valve. The heads are covered by aluminium rocker boxes that also support the rocker arms, which are part of the valvetrain.

The flywheel assembly's pinion and sprocket shafts are supported by bearings in the left and right engine crankcases. The left side flywheel sprocket shaft is supported by a double tapered, opposed Timken bearing and race set ($\pm 24729-52$, $1957-73/\pm 24729$ -74, 1974-85). A spacer in the middle of the bearing set determines flywheel endplay. The rotating sprocket shaft transfers engine power during the power stroke to the primary system and down the drivetrain. The 1957-76 right side flywheel pinion shaft is supported by cylindrical rollers (#24650-55), which consists of 13 loose rollers in a retainer. The 1977-85 right side flywheel pinion shaft is supported by a caged roller bearing (#24648-77). The pinion shaft pow-



ers the camshafts, valvetrain (pushrods and rocker arms), oil pump, ignition, idler gear, and generator (via the generator drive gear).

Sportster camshafts sit inside the gearcase compartment, under the right side cam cover. Each camshaft has one lobe that opens and closes its valve via the valvetrain. Some techies include the camshaft in the valvetrain and some do not. The camshaft's cam lobe pushes open the valve it controls while valve spring tension closes the valve once the cam lobe rotates down. The egg-shaped camshaft lobe is ramped on both the upward opening side and the downward closing side.

All OHC (overhead cam) engines, like the V-Rod, do not require a valve-train because the camshaft sits above the valves and controls them directly. These engines can rev really high compared to a pushrod-operated bike like the Ironhead Sportster. The valvetrain on an Ironhead is really four separate valvetrains, each beginning with a single camshaft lobe cam. Each separate camshaft lobe serves its valvetrain: front head exhaust valve, front head intake valve; rear head intake valve, and rear head exhaust valve.

Each valvetrain has a tappet roller (#18522-53A) supported by a tappet guide block (#18607-57B), solid lifter (#18508-52B, #18515-58A), pushrod (#17904-57), rocker arm (#17396-57A, front intake; #17397-57A, rear intake; #17394-57A, front exhaust; #17395-57A, rear exhaust), rocker arm shaft (#17435-57A), valve springs (#18203-57A, outer spring; #18204-57A, inner spring; #18220-57, lower collar; #18221-57A, upper collar; #18228-30, valve keys), and a valve (#18080-57, #18080-58A, #18033-80, exhaust; #18070-57. #18070-58, #18070-70, #18027-80, #18028-80, intake). The part numbers that end in suffix -57 are new Sportster parts, whereas the numbers ending in -52 are Model K parts carrying over into Sportster use. The part numbers that end in suffix -58 are parts that were upgraded in 1958 that will usually retrofit back to 1957. Part numbers that end in -80 indicating a new part that may or may not retrofit.

Ignition

AN EXTERNAL MECHANICAL POINTS ignition circuit breaker came on 1957-70 XL, XLH and 1970 XLCH models.

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Year	XL	XLA	XLC	XLCH	XLH	XLT	XLCR	XLS	XR-1000	XLX-61
1957	X	X								
1958	X		X	X	X					
1959	X			X	X					
1960				X	X					
1961				X	X					
1962				X	X					
1963				X	X					
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1975				X	X					
1976				X	X					
1977				X	X	X	X			
1978				X	X	X	X			
1979				X	X			X		
1980					X			X		
1981					X			X		
1982					X			X		
1983					X			X	X	X
1984					X			X	X	X
1985					X			X		X

The chart is a general guideline. Many specialty orders from governments, the police and military, plus organizations like the Shriners, wreak havoc on cataloging some model years and nomenclature. Note: parts books start referring to the XLH as a XL in 1979. This is confusing since the original 1957 XL was discontinued in 1959.

The 1958-69 XLCH models came with a magneto ignition. The 1971-78 Sportsters all used an internal mechanical points ignition, with the circuit breaker inside the gearcase cover. The 1979 models used the Prestolite V-Fire I electronic ignition with a mechanical advance/retard mechanism. The 1980-82 Sportsters used the Magnavox/Motorola V-Fire II full-electronic solidstate ignition. The 1983-85 models used the very superior V-Fire III electronic ignition, which is the first one to use a

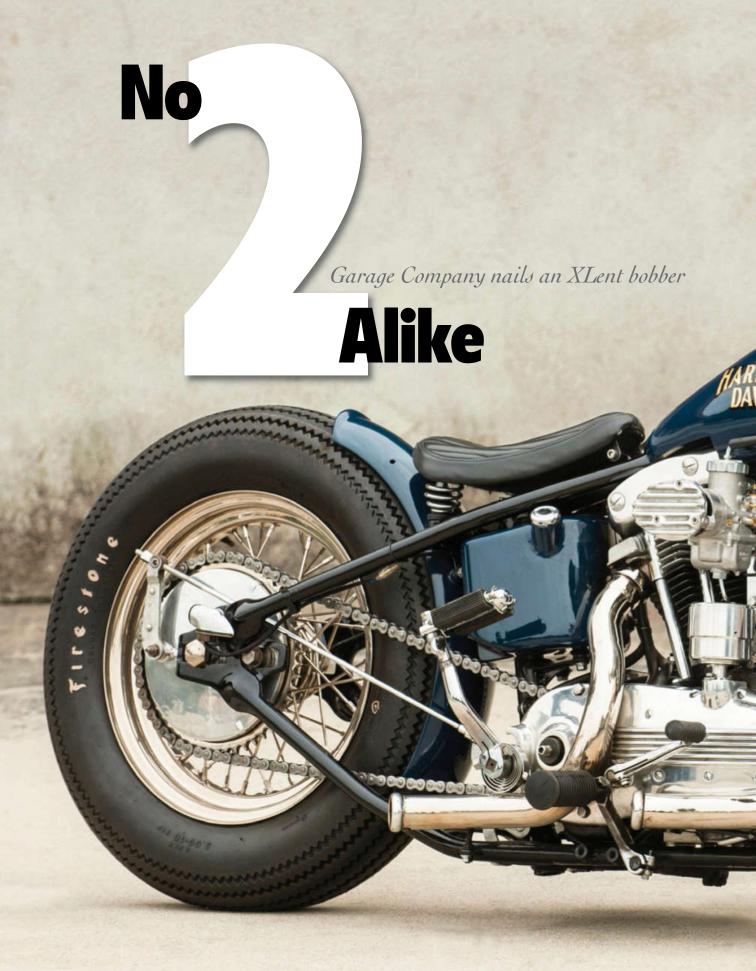
sensor: the vacuum-operated electrical switch (VOES). The VOES signals the V-Fire III's electronic control module (ECM) to control the advance and retard ignition settings based on vacuum conditions in the intake system.

Conclusion

WE'LL CONTINUE THIS DISCUSSION ON Ironhead Sportsters in the next issue.

Donny Petersen Donny Petersen.com









HERE ARE THREE THINGS THAT EVERY DIEHARD motorcyclist should do when visiting Southern California: take a ride up the famed Pacific Coast Highway, enjoy fish tacos at Neptune's Net in Malibu, and spend some quality time at Yoshi Kosaka's Garage Company in Inglewood.

Originally from Japan where he was a dental appliance engineer, Yoshi moved to California in 1984 to chase his passion for two wheels. What originally started out as a collection of old motorcycles and parts that he used as a source for building vintage racing bikes turned into a successful motorcycle business that today offers service, repair, restoration, customization, and special builds.

Actually, Yoshi's Garage Company is more than just a business; it's a vintage mecca for all things motorcycle, and it's packed to the gills with old repair manuals, movie posters, shirts, jackets, gloves, old-school helmets, and even motorcycle stamps. People come from all over the world to his shop in search of rare NOS parts for their latest projects or just to admire his eclectic ensemble of classic bikes and memorabilia.

And when it comes to building bikes, Yoshi has a preferred style, the classic bobber. But not all of his bikes look the same. In fact, every Garage Company bike is different. Yoshi doesn't sketch or draw his designs beforehand either; they've all evolved from visions that he creates in his head. Add in the fact that everything is done by hand without the use of any fancy CNC machinery, and it's evident how every bike Yoshi's shop builds turns out to be unique. The bike components that aren't crafted in house are usually pulled from the massive collection of NOS and vintage parts, giving those pieces a second chance at life on the road.

The bike featured here was built for a return customer, Ren Kani. Fully aware of Yoshi's style and talents, Ren simply contacted Yoshi, asked him to build him a bike, and let Yoshi handle the rest. No doubt, the perfect type of client for any builder.

Keeping with the slim, trim, compact bobber style that's so perfect for slipping through Southern California traffic, Yoshi started with a custom rigid frame that has 2" of stretch in the backbone. Yoshi decided to run a 16" laced-spoke



wheel on the rear and a taller 21" spoker up front. He lashed the 21" wheel to an inline springer. However, to keep the stance low and the frame rails parallel to the ground, he flipped the springer's rockers, which dropped the stance by about 2". With -5 degrees of stock Harley rake, the front wheel tucks tightly to the front downtubes; getting the neck angle right while coinciding with the other dimensions was quite a task, but one that Garage Company met with success.

Yoshi formed the handlebar from 7/8" mild steel tubing before mounting it to the custom Garage Company top clamp shaped out of brass. An internal throttle helps keep the bar area clean.

s WITH MOST BOBBERS, SHEET METAL WAS KEPT TO an extreme minimum. The bike's lines flow like those of a beautiful woman's body. And perched atop the backbone is a hand-crafted aluminum gas tank sporting even more voluptuous curves. A solo spring seat

gradually pulls your eyes around the backside to the classic Firestone tire that's dressed with a scant, high-and-tight rear fender.

Tucked neatly below the seat and mimicking the lines of the frame is a one-off oil tank.

You'll find a 1972 XL engine that Garage Company mildly rebuilt, which includes a set of Wiseco 11:1 pistons and S&S valves. Most of the other components are H-D units except for the Mikuni carb, Mallory ignition, and vintage Ed Roth finned air cleaner cover. The exhaust flows through a custom set of stainless steel shorty pipes with aluminum tips. Backing the 1000cc engine is an Andrews gearset, and while the engine build was relatively straightforward, Yoshi modified the XL cases to include a XR 750 primary cover.

Simple, clean, and classic were the names of the game

when it came to the finish and paint scheme, and Garage Company's in-house painter Emilio handled the duties. A combination of deep rich blue and creamy white, highlighted with classic gold lettering delivers a paint scheme that's timeless in its presentation. The stainless steel, polished, and nickel-plated components like the brass risers/top clamps give further hint to this bobber's vintage-style pedigree.

All in all, it took Yoshi and the Garage Company crew about 32 weeks to complete this incredible bobber. With its amazing lines and tight stance, the bike quickly catches your attention, which can sometimes be a tough thing to do in Southern California. Who knows? If you follow my advice and visit Garage Company's digs in Inglewood, you just might see Yoshi building another immaculate machine like this. Just know that it won't be exactly like this one, because no two of his bikes are ever the same. **AIM**



TECH SHEET

Owner: Ren Kani

Builder: Yoshi Kosaka, Garage Company, Inglewood, CA

Year/model: 1972 Harley-Davidson XLC

Time to build: 32 weeks
Chromer: Supreme Plating
Polisher: Supreme Plating

Powdercoater: Crisol Metal Finishing, Gardena, CA

Painter: Emilio
Colors Blue and cream

POWERPLANT

Engine: 1972 Harley-Davidson XL Builder: Garage Company

Displacement: 1000cc

Cases: Stock XL, modified to fit CH primary cover

Flywheels: Harley-Davidson
Connecting rods: Harley-Davidson
Cylinders: Harley-Davidson
Pistons: Wiseco 11:1
Heads: Harley-Davidson
Cams: Harley-Davidson P
Valves: S&S Cycle
Push rods: Harley-Davidson
Carb: Mikuni Easy
Air cleaner: Ed Roth

Ignition: Garage Company
Ignition: Mallory
Coils: Daytona Twin Tec

Primary cover: Harley-Davidson XR 750 **Transmission:** Harley-Davidson 1972 XL

Case: Harley-Davidson

Gears: Andrews
Clutch: Harley-Davidson
Primary drive: Chain
Final drive: Chain

Kickstarter: Harley-Davidson

CHASSIS

Frame: Garage Company
Rake: -5 degrees
Stretch: +2"
Front forks: Inline springer
Front wheel: 21"
Rear wheel: 16"

Front brake: Yamaha-ha-ha
Rear brake: Harley-Davidson XLCH
Front tire: Avon Speedmaster 21"
Rear tire: Firestone 16"
Rear fender: Triumph

ACCESSORIES

Headlight: Garage Company
Taillight: Vintage side maler
Fuel tank: Garage Company
Oil tank: Custom alloy
Handlebars: Garage Company 7/8"

Risers: Garage Company top T springer

Seat: Garage Company **Pegs:** Harley-Davidson **Speedo:** Electric

Hand controls: POSH Factory internal throttle

Foot controls: Harley-Davidson

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2016 H-D Fat Boy S

110" so you can play hard on your Softail

ERE'S A QUICK QUIZ FOR HARLEY AFICIONADOS: when is a Harley-Davidson Custom Vehicle Operations (CVO) model not really a CVO model?

Answer: when it's a 2016 FLSTFBS Fat Boy S or FLSS Slim S.

And Harley's two new S model Softails certainly are big news for one very big reason: both bikes are powered by the vaunted Screamin' Eagle 110" engine package, the same powerplant typically reserved only for CVO bikes. As a bonus, the S model upgrade also includes electronic cruise control and Harley's exclusive security system ignition as standard features that otherwise are options for the basemodel FLSTF Fat Boy and FLS Slim.

Of course, nothing in life is really free, and in this case, adding the big S to the model name adds \$3,000 to the Fat Boy's MSRP — the FLSTFBS' \$19,699 versus \$16,699 for the FLTFB (Vivid Black models in each case). The spread for the Slim's MSRP is slightly more at \$3,600 (Vivid Black). Remember, though, the price of the S includes the security system and cruise control that, when ordered separately, are worth nearly \$1,000 retail. So in the case of our feature model, the Fat Boy S, it's like upgrading a 103" Beta engine for about \$2,000. Good luck finding a dealer that will perform a comparable engine upgrade for anything near





that price, and keep in mind that the full factory warranty applies, too.

There are a few other identifiable features that separate the Fat Boy S from the standard Fat Boy or even the Fat Boy Lo besides the S being what Harley terms "the darkest Fat Boy ever." Foremost, you won't find much chrome or polished parts on the S. Black is the order of the day, and the upper tins and fork lowers, even the mufflers, have distinct blacked-out finishes. Adding to the Dark Custom persona are the Fat Boy's iconic dish aluminum wheels that have black centers highlighted by machined rim surfaces.

However, these blacked-out features take a backseat to the all-black engine. Foremost, the oval Screamin' Eagle Ventilator air cleaner cover, sporting faux carbon fiber inserts, has the words *Screamin' Eagle* on the surface. Let your eyes scan left or right from there and you'll see those same words again, this time on the cylinder heads just beneath the 110" engine's distinct blacked-out rocker covers.

But it's what's inside that really counts, and if you had a big red *S* on your chest, X-ray vision would let you see through the black engine cases of the Fat Boy S to view the 4"-bore pistons in each cylinder that, when combined with the Twin Cam's standard 4.374" stroke, yields 110" (in metric-ese that's 1801cc) displacement. The cams have slightly more aggressive shapes to their lobes, too, all in the interest of bigger performance. No other Softail model, with the exception of the Slim S, offers that.

So what's it like to ride the Fat Boy S? Well, when it's time to get your Fat S in gear, you're rewarded with snappy acceleration. Starting the big engine requires a simple push

of the electric kicker on the right handlebar, and if the engine proves stubborn, the automatic compression release does a good job of relieving pressure within the combustion chambers to help crank the engine to life. The first thing you'll notice is a slight rasp or burble in the exhaust tone. Free-flowing Screamin' Eagle mufflers have a habit of treating the bike owner to that aural beauty.

The hydraulic clutch delivers the same smooth, easy pull at the lever that you'll get from all of Harley's liquid clutches, too. Snick the six-speed Cruise Drive transmission into first gear before gently feeding the 110" engine throttle, and you're on your way. You can blast away hard from the line to marvel in the Screamin' Eagle power or simply motor up to speed at a casual pace, the choice is yours because this engine feels docile and mild until you dig in your boot spurs to roust it to speed.

PEAKING OF SPEED, YOU'LL HAVE A CLAIMED 108 FT-LBS. of torque (at 4000 rpm) on tap to play with. Compare that to the standard-issue High Output Twin Cam 103 found on the Fat Boy and Fat Boy Lo that delivers a claimed 100.3 ft-lbs. (at 3000 rpm), and you'll understand why it made sense when you paid the \$3,000 premium for this S package. And remember, that's not even considering the cruise control and security system bonus.

Back to the engine, though. You'll also enjoy how smooth that big motor can be at just about any speed. Let the



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The 5-gallon gas tank easily puts you in the 200-plus mile range, too, because you can expect more than 40 mpg under most riding conditions. Harley and the US Environmental Protection Agency (EPA) certify the Fat Boy S at 42 mpg under combined riding conditions, which is about right because I saw a low of 33 mpg (really hard riding) and a high of 47 mpg (just putting around in the local mountains, and the higher altitudes contributed to that high mpg figure because thin mountain air demands less fuel).

NTERESTINGLY, THOUGH, OUR PASSING ACCELERATION times with the Fat Boy S aren't much different than what we've experienced with previous 103"-powered Softails. Acceleration from 60 mph to 80 mph in fifth gear nets a time between 4.1 and 4.4 seconds, and going from 20 mph to 50 mph in second nets about 3.2 seconds. The similarity in these acceleration figures with 103" models is probably due to the 110" engine's torque curve, which peaks at 4000 rpm compared to the 103's 3000 rpm peak. Simply, the smaller engine is closer to its peak torque when you twist the throttle in fifth gear at 60 mph. However, once the 110" gains its steam, you'll feel a stronger surge as engine speed increases. Use the six-speed tranny to keep engine rpm high in any gear, and you'll always have instant power on tap. But if you're feeling lazy and don't feel like downshifting, slightly chugging the engine allows it to pull you smoothly and steadily up to speed without fanfare or hesitation.

At any rate of speed, the Fat Boy S offers a rather comfortable ride. The sculpted seat places you at about 2' off the deck, so it's easy for most riders to flat-foot it at stoplights and such. The big Boy's 41.3mm fork legs, with 5.1" of travel, do a worthy job of absorbing most road bumps, and

while Harley elected to equip the FLSTFBS with the shorter underbelly shocks that also come with the Fat Boy Lo, the ride remains relatively smooth at the rear, too. The standard Fat Boy has 4.4" of rear wheel travel, while the Lo and S have 1" less (3.4"). The difference equates to less than 1" in total ride height. Personally, I'd trade the ride height factor for more rear-wheel travel to produce a smoother ride over harsh bumps, but that's my personal preference. I say function trumps form if you're talking about less than an inch in the bike's overall aesthetics. Added ride height also increases the bike's lean angle while cornering, and this Softail easily drags its footboards in tight corners.

Back on the road, you're bound to find one of your favorite stretches of highway that will invite you to ride and ride and ride until, well, your right hand tires from holding the throttle open. But you don't have to worry about that anymore because if you look on the left handlebar of the S, you'll spot the cruise control button that's easy to operate for hands-free throttle riding. Here's how it works: push the Set button to activate the cruise control, determine what speed you want to cruise at before gently pressing the lever down with your thumb to set the speed, and wait for the green indicator light, letting you know the cruise control is engaged. Now let your right hand relax. Feels good, doesn't it? And should you need to suddenly deactivate the cruise control, simply roll off the throttle, tap the brakes, or push the control button one more time, and you'll regain control of your speed.

The Fat Boy has always been among this magazine's favorite bikes in Harley's lineup. The new S model in no way diminishes our opinion of the other two Fat Boy models, but we can't help but endear ourselves to the 110" engine's snappier performance. If you're looking for a Softail model with a worthy heritage (26 years now in the lineup!) but you'd like something with more power and cruise control, then you won't go wrong in stepping up to the S.

See the 2016 Fat Boy S' specifications as well as the rest of Harley's 2016 Big Twins specs in the following pages.



2016 HARLEY-DAVIDSON BIG TWINS

More power, more features, more riding pleasure

OR THE FIRST TIME EVER, HARLEY-DAVIDSON included the public — the global public — at its new-model launch, using the Periscope app for the occasion. H-D social media specialist Jeff Wick introduced those of us who tuned in to the live viewing app at 7 pm PST on Sunday, August 23, to the updated line of 2016 Dark

Customs, Touring models, and Sportsters. Whether or not this "launch" was a success no doubt will be decided during a boardroom meeting, but it certainly gives an idea of just how global the brand has become. As part of the Periscope launch, riders from around the world submitted live streams of themselves riding, essentially creating a 26,190-mile round-the-world ride in only a matter of minutes. Cool stuff,

> and a great way to get everyone involved in the model-year launch besides sitting at our computers constantly refreshing the Harley-Davidson web site. Don't tell me I'm the only one who does that, either!

> The biggest news this year is probably the all-new S models that feature 110" Screamin' Eagle Twin Cam engines in two existing cruiser packages. The Fat Boy S and the Slim S are the first to debut as S series bikes, and these fully optioned models are otherwise variations of their standard selves, but with a \$3,000 price increase. That MSRP range is much less than offering a full CVO (Custom Vehicle Operation) package upgrade on an existing model, yet the new S series includes that SE 110" engine upgrade. Hopefully more S models await us in the future!

> While the S series adds a new dimension to Harley's signature cruisers, the rest of the Softail line (and all Dynas except the Street Bob) receives the potent High Output Twin Cam 103. This air-cooled engine has a more aggressive cam profile and high-flow air cleaner than the standard issue TC 103, resulting in higher peak torque for 2016.

There's more news about the Softail family. All Softails come standard with electronic throttles to





O ROAD GLIDE ULTRA

Length: 102.2" (2595mm) Seat height: 29.7" (755mm), unladen

Ground clearance: 4.7" (120mm) Rake: 26 degrees **Trail:** 6.7" (170mm) Wheelbase: 64" (1625mm)

Engine: Twin-Cooled, High Output Twin Cam

103 (1690cc), rubber-mounted, Engine Idle Temperature Management Strategy

Compression: 9.2:1

Fuel system: Electronic Fuel Injection (ESPFI)

with heated 0₂ sensors

Coolant capacity: 1.1 quarts (1.04L)

Transmission: Six-speed Cruise Drive/Isolated Drive Front tire: Dunlop Harley-Davidson 130/80-17" Rear tire: Dunlop Harley-Davidson 180/65-16"

Front/rear tires: Pressure monitoring system **Fuel capacity:** 6.0 gallons (22.7L)

Oil capacity: 4.0 quarts (3.8L) **Shipped weight:** 905 pounds (411kg) **GVWR:** 1,360 pounds (617kg)

Front brakes: Reflex Linked ABS, Brembo dual

fixed four-piston (32mm) calipers with CVO-specific inserts, dual

11.81" x 0.20" floating rotors Rear brake: Reflex Linked ABS, Brembo

fixed four-piston (32mm) caliper

with CVO-specific inserts. 11.81" x 0.28" fixed rotor

Exhaust system: Chrome dual 4" touring

mufflers and touring muffler shields with chrome muffler end

caps with black spears

Front forks: 49mm, telescopic, triple-circuit

damping with LED front turn signals

Rear shocks: Air-adjustable full travel air ride Front wheel: TPMS Mirror Chrome Slicer

Custom: 3.00-17" Rear wheel: TPMS Mirror Chrome Slicer

Custom: 5.00-16"

Handlebars: Internally wired, LED-lit control

switches, two audio-controlling iovsticks: Airflow Collection heated handgrips with adjustable six-

setting heat control

Colors: Ruby Red/Palladium Silver.

Stardust Silver/Palladium Silver, Charcoal Slate/Carbon Dust: color-matched inner fairing, diamond-cut fairing cap

MSRP: \$40,299



CVO LIMITED

Length: 102.4" (2600mm) Seat height: 29.1" (740mm), unladen

Ground clearance: 5.3" (135mm)

Rake: 26 degrees **Trail:** 6.7" (170mm) Wheelbase: 64" (1625mm)

Engine: Twin-Cooled, High Output Twin Cam

103 (1690cc), rubber-mounted, Engine Idle Temperature Management Strategy

Compression: 9.2:1

Fuel system: Electronic Fuel Injection (ESPFI) with

heated 02 sensors

Coolant capacity: 1.1 quarts (1.04L)

Transmission: Six-speed Cruise Drive/Isolated Drive Front tire: Dunlop Harley-Davidson 130/80-17" Rear tire: Dunlop Harley-Davidson 180/65-16"

Front/rear tires: Pressure monitoring system

Fuel capacity: 6.0 gallons (22.7L) Oil capacity: 4.0 quarts (3.8L)

Shipped weight: 906 pounds (411kg) **GVWR:** 1,360 pounds (617kg)

Front brakes: Reflex Linked ABS, Brembo dual

fixed four-piston (32mm) calipers with CVO-specific inserts,

11.81" x 0.20" dual floating rotors

Rear brake: Reflex Linked ABS, Brembo fixed four-piston (32mm) caliper

with CVO-specific inserts. 11.81" x 0.28" fixed rotor

Exhaust system: Chrome dual 4" touring mufflers and

touring muffler shields with chrome muffler end caps with black spears

Front forks: 49mm, telescopic, triple-circuit damping with LED front turn signals

Rear shocks: Air-adjustable full travel air ride

Front wheel: TPMS Mirror Chrome Slicer Custom: 3.00-17"

Rear wheel: TPMS Mirror Chrome Slicer

Custom; 5.00-16"

Handlebars: Internally wired, LED-lit control

switches and two audio-controlling joysticks; Airflow Collection heated handgrips with adjustable

six-setting heat control Colors: Palladium Silver/Phantom Blue,

Carbon Dust/Electric Red Pearl. Charcoal Slate/Palladium Silver; color-matched inner fairing, diamond-cut fairing cap and Splitstream fairing vents

MSRP: \$39,999



CVO STREET GLIDE

Length: 96.7" (2455mm) Seat height: 27.2" (690mm), unladen

Ground clearance: 4.9" (125mm) Rake: 26 degrees **Trail:** 6.7" (170mm) Wheelbase: 64" (1625mm)

Engine: Twin-Cooled, High Output Twin Cam

103 (1690cc), rubber-mounted, Engine Idle Temperature Management Strategy

Compression: 9.2:1

Fuel system: ESPFI with heated 0₂ sensors

Coolant capacity: 1.1 quarts (1.04L)

Transmission: Six-speed Cruise Drive/Isolated Drive Front tire: Dunlop Harley-Davidson 130/60-19"

Rear tire: Dunlop Harley-Davidson 180/55-18"

Front/rear tires: Pressure monitoring system Fuel capacity: 6.0 gallons (22.7L)

Oil capacity: 4.0 quarts (3.8L) **Shipped weight:** 833 pounds (378kg)

GVWR: 1,360 pounds (617kg)

Front brakes: Reflex Linked ABS, Brembo dual fixed four-piston (32mm) calipers

with CVO-specific inserts,

11.81" x 0.20" dual floating rotors Rear brake: Reflex Linked ABS, Brembo fixed four-

piston (32mm) caliper, CVO-specific

inserts. 11.81" x 0.28" fixed rotor Exhaust system: Same as CVO Limited and Road Glide

Ultra but with Airflow end caps

Front forks: 49mm, telescopic, with triple-circuit damping with LED front turn signals

Rear shocks: Premium low hand adjustable

Front wheel: TPMS five-spoke Mirror Chrome Aggressor Custom; 3.50-19"

Rear wheel: TPMS five-spoke Mirror Chrome Aggressor Custom; 5.00-18"

Front/rear wheels: Contrast Chrome (Carbon Crystal/

Phantom Flames, White Amethyst/ Black Licorice Flames); chrome

matching five-spoke floating front rotors (Atomic Red/Candy Apple Flames, Black Licorice/Mid. Cobalt Flames)

Handlebars: Airflow Collection heated handgrips with two audio-controlling joysticks

Colors: Atomic Red/Candy Apple Flames, White Amethyst/Black Licorice

Flames, Black Licorice/Midnight Cobalt Flames, Carbon Crystal/ Phantom Flames: color-matched Splitstream fairing vents

MSRP: \$36,799



ULTRA LIMITED LOW

Length: 102.4" (2600mm)

Seat height: 27" (685mm), unladen

Ground clearance: 4.6" (115mm)
Rake: 26 degrees
Trail: 6.7" (170mm)
Wheelbase: 64" (1625mm)

Engine: Twin-Cooled, High Output Twin Cam

103 (1690cc), rubber-mounted, black powercoat, chrome covers, Engine Idle Temperature Management Strategy

Compression: 10:1

Fuel system: ESPFI, heated 0₂ sensors

Coolant capacity: 1.1 quarts (1.04L)

Transmission: Six-speed Cruise Drive/Isolated Drive
Front tire: Dunlop Harley-Davidson 130/80-17"
Rear tire: Dunlop Harley-Davidson 180/65-16"

Oil capacity: 4.0 quarts (3.8L)

Shipped weight: 861 pounds (391kg)

GVWR: 1,360 pounds (617kg)

Fuel capacity: 6.0 gallons (22.7L)

Front brakes: Reflex Linked ABS, Brembo dual

fixed four-piston (32mm) calipers,

dual 11.81" x 0.20" floating rotors **Rear brake:** Reflex Linked ABS, Brembo fixed

four-piston (32mm) caliper,

11.81" x 0.28" fixed rotor

Exhaust system: Chrome 2-into-1-into-2 dual

with tapered mufflers

Front forks: 49mm, lowered single-side cartridge **Rear shocks:** Premium low hand-adjustable

Front wheel: Contrast Chrome, cast aluminum

Impeller; 3.00-17"

Rear wheel: Contrast Chrome, cast aluminum

Impeller; 5.00-16"

Handlebars: Pullback with smaller-diameter,

heated handgrips with adjustable six-setting heat controls 2" closer, two audio-controlling joysticks

Colors: Vivid Black/medium silver pinstriping;

Black Quartz/Pale Gold pinstriping; Amber Whiskey/Vivid Black/medium red pinstriping; Deep Jade Pearl/ Vivid Black/light green pinstriping; Billet Silver/Vivid Black/Burgundy pinstriping; Mysterious Red Sunglo/ Velocity Red Sunglo/medium red pinstriping; Custom colors: Purple Fire/Blackberry Smoke/Proper Purple and Charcoal Metallic pinstriping;

Cosmic Blue Pearl MSRP: \$27,299-\$28,599



ULTRA LIMITED

Length: 102.4" (2600mm)

Seat height: 29.1" (740mm), unladen

Ground clearance: 5.3" (135mm)
Rake: 26 degrees
Trail: 6.7" (170mm)
Wheelbase: 64" (1625mm)

Engine: Twin-Cooled, High Output Twin Cam

103 (1690cc), rubber-mounted, black powercoat, chrome covers, Engine Idle Temperature Management Strategy

Compression: 10:1

Fuel system: ESPFI, heated 0₂ sensors

Coolant capacity: 1.1 quarts (1.04L)

Transmission: Six-speed Cruise Drive/Isolated Drive
Front tire: Dunlop Harley-Davidson 130/80-17"
Rear tire: Dunlop Harley-Davidson 180/65-16"

Fuel capacity: 6.0 gallons (22.7L)
Oil capacity: 4.0 quarts (3.8L)
Shipped weight: 861 pounds (391kg)
GVWR: 1,360 pounds (617kg)

Front brakes: Reflex Linked ABS, Brembo dual

fixed four-piston (32mm) calipers,

dual 11.81" x 0.20" floating rotors **Rear brake:** Reflex Linked ABS. Brembo fixed

four-piston (32mm) caliper,

11.81" x 0.28" fixed rotor

Exhaust system: Chrome 2-into-1-into-2 dual

with tapered mufflers 49mm telescopic

Front forks: 49mm, telescopic

Rear shocks: Air-adjustable, full-travel air ride **Front wheel:** Contrast Chrome, cast aluminum

Impeller; 3.00-17"

Rear wheel: Contrast Chrome, cast aluminum

Impeller; 5.00-16"

Handlebars: Heated handgrips with adjustable

six-setting heat controls, two audio-controlling joysticks

Colors: Vivid Black/medium silver pinstriping;

Black Quartz/Pale Gold pinstriping; Amber Whiskey/Vivid Black/medium red pinstriping; Deep Jade Pearl/ Vivid Black/light green pinstriping; Billet Silver/Vivid Black/Burgundy pinstriping; Mysterious Red Sunglo/Velocity Red Sunglo/ medium red pinstriping; Custom colors: Purple Fire/Blackberry Smoke/Proper Purple and Charcoal

Metallic pinstriping; Cosmic Blue Pearl **MSRP:** \$26,399-\$27,699



ROAD GLIDE ULTRA

Length: 102.2" (2595mm) **Seat height:** 29.7" (755mm), unladen

Ground clearance: 4.7" (120mm)

Rake: 26 degrees

Trail: 6.7" (170mm)

Wheelbase: 64" (1625mm)

Engine: Twin-Cooled, High Output

Twin Cam 103 (1690cc), rubbermounted, integrated oil cooler, Engine Idle Temperature

Management Strategy, reduce-width

primary

Compression: 9.7:1

Fuel system: Electronic Sequential Port Fuel Injection (ESPFI), heated 0₂ sensors

Coolant capacity: 1.1 quarts (1.04L)

Transmission: Six-speed Cruise Drive/Isolated Drive Front tire: Dunlop Harley-Davidson 130/80-17" Rear tire: Dunlop Harley-Davidson 180/65-16"

Fuel capacity: 6.0 gallons (22.7L)
Oil capacity: 4.0 quarts (3.8L)
Shipped weight: 881 pounds (400kg)
GVWR: 1,360 pounds (617kg)

Front brakes: Reflex Linked ABS, Brembo dual

fixed four-piston (32mm) calipers, dual 11.81" x 0.20" floating rotors

Rear brake: Reflex Linked ABS, Brembo fixed

four-piston (32mm) caliper,

11.81" x 0.28" fixed rotor

Exhaust system: Chrome 2-into-1-into-2 **Front forks:** 49mm, telescopic

Rear shocks: Air-adjustable, full-travel air ride **Front wheel:** Cast aluminum Impeller; 3.00-17" **Rear wheel:** Cast aluminum Impeller; 5.00-16"

Handlebars: 1.25" diameter, reduced reach and improved wrist angle; heated handgrips with adjustable six-setting heat controls, two

audio-controlling joysticks

Colors: Billet Silver/Vivid Black with

Burgundy/Charcoal Metallic pinstriping; Mysterious Red Sunglo/Velocity Red Sunglo with medium red/Pale Gold pinstriping; Customs colors: Purple Fire Blackberry Smoke with Proper Purple/Charcoal Metallic pinstriping; Cosmic Blue Pearl

MSRP: \$25,699-\$26,999



OAD GLIDE SPECIAL

Length: 95.6" (2428mm) Seat height: 27.4" (695mm), unladen

Ground clearance: 5.5" (140mm) Rake: 26 degrees **Trail:** 6.8" (173mm) Wheelbase: 64" (1625mm)

Engine: Air-Cooled, High Output Twin Cam

103 (1690cc), rubber-mounted, black powdercoated, chrome covers. integrated oil cooler. Engine Idle Temperature Management Strategy,

reduced-width primary

Compression: 9.7:1

Fuel system: Electronic Sequential Port Fuel

Injection (ESPFI), heated 0₂ sensors

Transmission: Six-speed Cruise Drive/Isolated Drive Front tire: Dunlop Harley-Davidson 130/60-19" Rear tire: Dunlop Harley-Davidson 180/65-16"

Fuel capacity: 6.0 gallons (22.7L) Oil capacity: 4.0 quarts (3.8L) **Shipped weight:** 813 pounds (369kg)

GVWR: 1,360 pounds (617kg)

Front brakes: Reflex Linked ABS, Brembo dual fixed four-piston (32mm) calipers.

dual 11.81" x 0.20" floating rotors

Rear brake: Reflex Linked ABS, Brembo fixed

four-piston (32mm) caliper,

11.81" x 0.28" fixed rotor

Exhaust system: Chrome 2-into-1-into-2 dual with

tapered mufflers

Front forks: 49mm, telescopic

Rear shocks: CVO-style hand-adjustable,

low-profile, full-travel air ride

Front wheel: Cast aluminum Enforcer: 3.50-19" Rear wheel: Cast aluminum Enforcer; 5.00-16" Handlebars: Reduced reach and improved wrist

> angle: heated handgrips with adjustable six-setting heat controls,

two audio-controlling joysticks **Colors:** Vivid Black with medium silver

> pinstriping, Superior Blue with blue pinstriping, Black Quartz with Pale Gold pinstriping, Velocity Red Sunglo with medium red pinstriping; Custom color: Cosmic Blue Pearl; Hard Candy Customs: Hard Candy Gold Flake, Hard Candy Black Gold

Flake

MSRP: \$23,499-\$26,499



STREET GLIDE SPECIAL

Length: 96.5" (2450mm) Seat height: 27.4" (695mm), unladen

Ground clearance: 5.3" (135mm) Rake: 26 degrees

> **Trail:** 6.8" (173mm) Wheelbase: 64" (1625mm)

> > **Engine:** Air-Cooled, High Output Twin Cam

103 (1690cc), rubber-mounted, black powdercoated, chrome covers, integrated oil cooler. Engine Idle Temperature Management Strategy,

reduced-width primary

Compression: 9.7:1

Fuel system: Electronic Sequential Port Fuel Injection (ESPFI), heated 0₂ sensors

Coolant capacity: 1.1 quarts (1.04L)

Transmission: Six-speed Cruise Drive/Isolated Drive Front tire: Dunlop Harley-Davidson 130/60-19"

Rear tire: Dunlop Harley-Davidson 180/65-16" **Fuel capacity:** 6.0 gallons (22.7L)

Oil capacity: 4.0 quarts (3.8L) **Shipped weight:** 775 pounds (352kg) **GVWR:** 1,360 pounds (617kg)

Front brakes: Reflex Linked ABS, Brembo dual

fixed four-piston (32mm) calipers, dual 11.81" x 0.20" floating rotors

Rear brake: Reflex Linked ABS, Brembo fixed

four-piston (32mm) caliper. 11.81" x 0.28" fixed rotor

Exhaust system: Chrome 2-into-1-into-2 dual with

tapered mufflers

Front forks: 49mm, telescopic with dual

halogen headlight

Rear shocks: CVO-style hand-adjustable.

low-profile, full-travel air ride Front wheel: Cast aluminum Enforcer; 3.50-19"

Rear wheel: Cast aluminum Enforcer: 5.00-16" Handlebars: Heated handgrips with adjustable

> six-setting heat controls, two audio-controlling joysticks

Colors: Vivid Black/medium silver pin-

striping, Black Denim/medium red pinstriping, Deep Jade Pearl/light green pinstriping, Charcoal Denim/ Charcoal Metallic pinstriping, Velocity Red Sunglo/medium red pinstriping; Custom color: Cosmic Blue Pearl; Hard Candy Customs: Hard Candy Gold Flake, Hard Candy Black Gold

Flake

MSRP: \$23,199-\$26,199



GLIDE ULTRA CLASSIC LO

Length: 102.4" (2600mm) Seat height: 27" (686mm), unladen

Ground clearance: 4.6" (115mm) Rake: 26 degrees **Trail:** 6.7" (170mm) Wheelbase: 64" (1625mm)

Engine: Air-Cooled, High Output Twin Cam

103 (1690cc), rubber-mounted, black powdercoated, chrome covers, integrated oil cooler. Engine Idle Temperature Management Strategy,

reduced-width primary

Compression: 9.7:1

Fuel system: Electronic Sequential Port Fuel Injection (ESPFI), heated 0₂ sensors

Transmission: Six-speed Cruise Drive/Isolated Drive Front tire: Dunlop Harley-Davidson 130/80-17" Rear tire: Dunlop Harley-Davidson 180/65-16"

Fuel capacity: 6.0 gallons (22.7L) Oil capacity: 4.0 quarts (3.8L) **Shipped weight:** 844 pounds (383kg) **GVWR:** 1,360 pounds (617kg)

Front brakes: Reflex Linked ABS, Brembo dual

fixed four-piston (32mm) calipers.

dual 11.81" x 0.20" floating rotors Rear brake: Reflex Linked ABS, Brembo fixed

four-piston (32mm) caliper,

11.81" x 0.28" fixed rotor

Exhaust system: Chrome 2-into-1-into-2 dual with tapered mufflers

Front forks: 49mm, lowered single-side cartridge **Rear shocks:** Premium low hand-adjustable Front wheel: Cast aluminum Impeller: 3.00-17" **Rear wheel:** Cast aluminum Impeller: 5.00-16"

Handlebars: Pullback with smaller-diameter grips 2" closer with two

audio-controlling joysticks

Colors: Vivid Black/medium silver pinstriping, Superior Blue/blue and medium

silver pinstriping, Billet Silver/ **Burgundy and Charcoal Metallic** pinstriping, Amber Whiskey/ Charcoal Pearl/gray and Burgundy pinstriping, Mysterious Red Sunglo/ Velocity Red Sunglo/medium red and Pale Gold pinstriping: Custom colors: Purple Fire/Blackberry Smoke/Proper Purple and Charcoal Metallic pinstriping, Cosmic Blue Pearl

MSRP: \$24,699-\$25,999



E GLIDE ULTRA CLASSIC

Length: 102.4" (2600mm)
Seat height: 29.1" (740mm), unladen

Ground clearance: 5.3" (135mm) **Rake:** 26 degrees **Trail:** 6.7" (170mm) **Wheelbase:** 64" (1625mm)

Engine: Air-cooled, High Output

Twin Cam 103 (1690cc) with rubber-mounted, black powder-coated powertrain with chrome covers, integrated oil cooler with reduced-width primary and Engine Idle Temperature Management Strategy

Compression: 9.7:1

Fuel system: Electronic Sequential Port

Fuel Injection (ESPFI) with heated

0₂ sensors

Transmission: Six-speed Cruise Drive/Isolated Drive
Front tire: Dunlop Harley-Davidson 130/80-17"
Rear tire: Dunlop Harley-Davidson 180/65-16"

Fuel capacity: 6.0 gallons (22.7L)
Oil capacity: 4.0 quarts (3.8L)
Shipped weight: 844 pounds (383kg)

GVWR: 1,360 pounds (617kg)

Front brakes: Reflex Linked ABS, Brembo dual

fixed four-piston (32mm) calipers, dual 11.81" x 0.20" floating rotors

Rear brake: Reflex Linked ABS, Brembo fixed

four-piston (32mm) caliper,

11.81" x 0.28" fixed rotor

Exhaust system: Chrome 2-into-1-into-2 dual with tapered mufflers

Front forks: 49mm, telescopic

Rear shocks: Air-adjustable full-travel air ride
Front wheel: Cast aluminum Impeller; 3.00-17"
Rear wheel: Cast aluminum Impeller; 5.00-16"
Handlebars: Pullback, audio-controlling joysticks
Colors: Vivid Black/medium silver

pinstriping; Superior Blue/blue and medium silver pinstriping; Billet Silver/Burgundy and Charcoal Metallic pinstriping; Amber Whiskey/ Charcoal Pearl/gray and Burgundy pinstriping; Mysterious Red Sunglo/

pinstriping; Mysterious Red Sunglo/ Velocity Red Sunglo/medium red and Pale Gold pinstriping; Custom colors: Purple Fire/Blackberry Smoke/ Proper Purple and Charcoal Metallic

pinstriping; Cosmic Blue Pearl MSRP: \$23,549-\$24,849



ROAD GLIDE

Length: 95.6" (2428mm) **Seat height:** 27.4" (696mm), unladen

Ground clearance: 5.3" (135mm) **Rake:** 26 degrees

Trail: 6.8" (173mm) **Wheelbase:** 64" (1625mm)

Engine: Air-Cooled, High Output

Twin Cam 103 (1690cc), rubbermounted, black powdercoated powertrain with chrome covers, integrated oil cooler, Engine Idle Temperature Management Strategy,

reduced-width primary

Compression: 9.7:1

Fuel system: Electronic Sequential Port Fuel

Injection (ESPFI) with heated

 0_2 sensors

Transmission: Six-speed Cruise Drive/Isolated Drive

Front tire: Dunlop Harley-Davidson 130/60-19"
Rear tire: Dunlop Harley-Davidson 180/65-16"

Fuel capacity: 6.0 gallons (22.7L)
Oil capacity: 4.0 quarts (3.8L)
Shipped weight: 813 pounds (369kg)
GVWR: 1.360 pounds (617kg)

Front brakes: Brembo dual fixed four-piston

(32mm) calipers, dual 11.81" x 0.20" floating rotors; optional Reflex

Linked ABS

Rear brake: Brembo fixed four-piston (32mm)

caliper, 11.81" x 0.28" fixed rotor; optional Reflex Linked ABS

Exhaust system: Chrome 2-into-1-into-2 dual with

tapered mufflers

Front forks: 49mm, telescopic

Rear shocks: Low air-adjustable low-profile air ride
Front wheel: Cast aluminum Enforcer; 3.50-19"
Rear wheel: Cast aluminum Enforcer; 5.00-16"
Handlebars: Reduced reach and improved wrist

angle; heated handgrips with adjustable six-setting heat controls,

two audio-controlling joysticks

Colors: Vivid Black, Amber Whiskey, Charcoal Pearl, Black Denim; Hard Candy Customs: Hard Candy Gold

Flake, Hard Candy Black Gold Flake

MSRP: \$21,199-\$24,199



STREET GLIDE .

Length: 96.5" (2450mm) **Seat height:** 27.4" (695mm), unladen

Ground clearance: 5.3" (135mm)
Rake: 26 degrees
Trail: 6.8" (173mm)
Wheelbase: 64" (1625mm)

Engine: Air-Cooled, High Output Twin Cam

103 (1690cc), rubber-mounted, black powdercoated powertrain with chrome covers, integrated oil cooler, Engine Idle Temperature

Engine Idle Temperature
Management Strategy, reduced-

width primary

Compression: 9.7:1

Fuel system: Electronic Sequential Port Fuel

Injection (ESPFI) with heated

0₂ sensors

Transmission: Six-speed Cruise Drive/Isolated Drive
Front tire: Dunlop Harley-Davidson 130/60-19"
Rear tire: Dunlop Harley-Davidson 180/65-16"

Fuel capacity: 6.0 gallons (22.7L)
Oil capacity: 4.0 quarts (3.8L)
Shipped weight: 775 pounds (352kg)
GVWR: 1.360 pounds (617kg)

Front brakes: Brembo dual fixed four-piston

(32mm) calipers, dual 11.81" x 0.20" floating rotors; optional

floating rotors; optional Reflex Linked ABS

Rear brake: Brembo fixed four-piston (32mm) caliper, 11.81" x 0.28" fixed rotor;

optional Reflex Linked ABS

Exhaust system: Chrome 2-into-1-into-2 dual with

tapered mufflers

Front forks: 49mm, telescopic

Rear shocks: Low air-adjustable low-profile air ride Front wheel: Cast aluminum Enforcer; 3.50-19" Rear wheel: Cast aluminum Enforcer; 5.00-16" Handlebars: Reduced reach and improved wrist

> angle; heated handgrips with adjustable six-setting heat controls, two audio-controlling joysticks

Colors: Vivid Black, Amber Whiskey, Black Denim, Crushed Ice Pearl, Olive Gold;

Hard Candy Customs: Hard Candy Gold Flake, Hard Candy Black Gold Flake

MSRP: \$20,899-\$23,899



ROAD KING

Length: 96.5" (2450mm) **Seat height:** 28.2" (715mm), unladen

 Ground clearance:
 5.3" (135mm)

 Rake:
 26 degrees

 Trail:
 6.7" (170mm)

 Wheelbase:
 64" (1625mm)

Engine: Air-cooled, High Output Twin Cam

103 (1690cc), rubber-mounted, black powdercoated powertrain, chrome covers, reduced-width primary and derby cover, oil cooler, Engine Idle Temperature Management Strategy

Compression: 9.7:1

Fuel system: Electronic Sequential Port Fuel

Injection (ESPFI), heated 0₂ sensors **Transmission:** Six-speed Cruise Drive/Isolated Drive

Front tire: Dunlop H-D 130/80-17"
Rear tire: Dunlop H-D 180/65-16"
Fuel capacity: 6.0 gallons (22.7L)
Oil capacity: 4.0 quarts (3.8L)
Shipped weight: 779 pounds (353kg)

GVWR: 1,360 pounds (617kg)

Front brakes: Prombe dual fixed for

Front brakes: Brembo dual fixed four-piston (32mm) calipers, 11.81" x 0.20"

floating open rotors (not available with optional laced wheels); optional Reflex Linked ABS

Rear brake: Brembo fixed four-piston (32mm)

caliper, 11.81" x 0.28" fixed rotor;

optional Reflex Linked ABS **Exhaust system:** Chrome 2-into-1-into-2 dual

with tapered mufflers **Front forks:** 49mm, telescopic

Rear shocks: Air-adjustable full-travel air ride **Front wheel:** Cast aluminum Impeller; 3.00-17";

optional chrome laced

Rear wheel: Cast aluminum Impeller; 5.00-16"; optional chrome laced

Handlebars: Stainless steel, ergonomic

Colors: Vivid Black/medium silver pinstrip-

ing; Billet Silver/Burgundy, Charcoal Metallic pinstriping; Velocity Red Sunglo, medium red and Pale Gold pinstriping; Deep Jade Pearl/Vivid Black, light green and Pale Gold pinstriping; Crushed Ice Pearl/Frosted Teal Pearl, gray and Teal pinstriping; Custom colors: Purple Fire/Blackberry Smoke, gray and Teal pinstriping; Cosmic Blue Pearl

MSRP: \$18,749-\$19,749



SWITCHBACK

Length: 92.9" (2360mm) **Seat height:** 27.4" (695mm), unladen

Ground clearance: 4.3" (110mm)

Rake: 29.9 degrees

Trail: 5.8" (148mm)

Wheelbase: 62.8" (1595mm)

Engine: Air-cooled, High Output Twin Cam 103 (1690cc) with rubber-mounted, black powdercoated powertrain with polished treatment covers; optional Engine Idle Temperature

Management Strategy

Compression: 9.6:1

Fuel system: Electronic Sequential Port Fuel Injection (ESPFI) with heated

0₂ sensors

Transmission: Six-speed Cruise Drive

Front tire: Dunlop Harley-Davidson 130/70-18"

Rear tire: Dunlop Harley-Davidson 160/70-17"

Fuel capacity: 4.7 gallons (17.8L)

Oil capacity: 3.0 quarts (2.8L)

Shipped weight: 696 pounds (316kg)

GVWR: 1,170 pounds (530kg)

Front brake: ABS, fixed four-piston caliper; 11.80" x 0.20" floating uniform

expansion rotor

Rear brake: ABS, floating, torque-free

two-piston caliper; 11.50" x 0.20"

fixed uniform expansion rotor

Chrome 2-into-1 with

Exhaust system: Chrome 2-into-1 with straight-cut muffler

Front forks: 41.3mm with 20mm cartridge

valve damping and triple-rate spring **Rear shocks:** Nitrogen-charged 36mm monotube

oil emulsion damper with five-step, preload adjustable dual-rate spring

and retro cigar-tube covers

Front wheel: Black, five-spoke cast aluminum with highlighted rim; 3.50-18"

Rear wheel: Black, five-spoke cast aluminum

with highlighted rim; 4.50-17"

Stainless steel, mini-angelanger

Handlebars: Stainless steel, mini-apehanger Colors: Vivid Black, Deep Jade Pearl.

Velocity Red Sunglo MSRP: \$17,199, \$17,599



WIDE GLIDE

Length: 96.3" (2445mm) **Seat height:** 26.8" (680mm), unladen

 Ground clearance:
 3.9" (100mm)

 Rake:
 34 degrees

 Trail:
 5.2" (132mm)

 Wheelbase:
 67.5" (1715mm)

Engine: Air-cooled, High Output Twin Cam

103 (1690cc) with rubber-mounted, black powdercoated powertrain with chrome covers; optional Engine Idle Temperature Management Strategy

Compression: 9.6:1

Fuel system: Electronic Sequential Port Fuel

Injection (ESPFI) with heated

0₂ sensors

Transmission: Six-speed Cruise Drive

Front tire: Michelin Scorcher "31" 80/90-21" Rear tire: Michelin Scorcher "31" 180/60-17"

Fuel capacity: 4.7 gallons (17.8L)
Oil capacity: 3.0 quarts (2.8L)
Shipped weight: 650 pounds (295kg)
GVWR: 1,085 pounds (492kg)

Front brake: ABS, fixed four-piston caliper;

11.80" x 0.20" floating uniform

expansion rotor

Rear brake: ABS, floating, torque-free

two-piston caliper; 11.50" x 0.23" fixed uniform expansion rotor

Exhaust system: Chrome, Tommy Gun 2-into-1-into-2

collector with dual mufflers

Front forks: 49mm with polished aluminum

triple clamp and dual-rate springs

Rear shocks: Coil-over

Front wheel: Black, steel laced; 2.15"-21" Rear wheel: Black, steel laced; 4.50"-17"

Handlebars: 1.25" drag bars, internally wired on

4" black riser

Colors: Vivid Black with medium silver

pinstriping, Charcoal Pearl with Faded Flames, Black Denim with Bright Flames, Black Quartz with Faded Flames, Velocity Red Sunglo

with Faded Flames

MSRP: \$15,999, \$16,749



FAT ROR

Length: 94.5" (2400mm)
Seat height: 27.2" (690mm), unladen

Ground clearance: 4.9" (125mm) **Rake:** 29 degrees **Trail:** 4.9" (125mm) **Wheelbase:** 63.8" (1620mm)

Engine: Air-cooled, High Output Twin Cam

103 (1690cc), rubber-mounted, with blacked-out powdercoated powertrain with polished highlights; optional Engine Idle Temperature

Management Strategy

Compression: 9.6:1

Fuel system: Electronic Sequential Port

Fuel Injection (ESPFI) with heated

0₂ sensors

Transmission: Six-speed Cruise Drive

Front tire: Dunlop Harley-Davidson 130/90-16" **Rear tire:** Dunlop Harley-Davidson 180/70-16"

Fuel capacity: 5.0 gallons (18.9L)
Oil capacity: 3.0 quarts (2.8L)
Shipped weight: 673 pounds (305kg)
GVWR: 1,085 pounds (492kg)

GVWR: 1,085 pounds (492kg) **Front brakes:** Dual fixed four-pictor

Front brakes: Dual fixed four-piston calipers; 11.80" x 0.20" dual floating uniform

expansion rotors; optional ABS

Rear brake: Floating, torque-free two-piston

caliper; 11.50" x 0.23" fixed uniform

expansion rotor; optional ABS

Exhaust system: Chrome, Tommy Gun 2-into-1-into-2 collector with dual blunt-cut mufflers

Front forks: 49mm with polished aluminum

triple clamp and dual-rate springs

Rear shocks: Fully covered, coil-over

Front wheel: Black aluminum, slotted disc with laser-etched graphics; 3.00-16"

Rear wheel: Black aluminum, slotted disc with

Handlebars: 1.25" drag style, internally wired

Colors: Vivid Black, Black Denim, Velocity
Red Sunglo, Olive Gold

MSRP: \$15,899, \$16,299



LOW RIDER

Length: 92.3" (2345mm) **Seat height:** 26.8" (680mm), unladen

Ground clearance: 4.1" (105mm) **Rake:** 30.5 degrees **Trail:** 5.1" (128.3mm)

Wheelbase: 64.2" (1630mm)

Engine: Air-cooled, High Output Twin Cam

103 (1690cc), rubber-mounted, with wrinkle black and chrome powertrain with high-flow air intake cover; optional Engine Idle

Temperature Management Strategy

Compression: 9.6:1

Fuel system: Electronic Sequential Port Fuel

Injection (ESPFI)

Transmission: Six-speed Cruise Drive

Front tire: Michelin Scorcher "31" 100/90-19" Rear tire: Michelin Scorcher "31" 160/70-17"

Fuel capacity: 4.7 gallons (17.8L)
Oil capacity: 3.0 quarts (2.8L)
Shipped weight: 644 pounds (292kg)
GVWR: 1,085 pounds (492kg)

Front brakes: Dual fixed four-piston calipers; 11.80" x 0.20" dual floating uniform

expansion rotors; optional ABS

Rear brake: Floating, torque-free two-piston caliper: 11.50" x 0.23" fixed uniform

caliper; 11.50" x 0.23" fixed uniforn expansion rotor; optional ABS

Exhaust system: 2-into-1 collector style

Front forks: 49mm with polished aluminum

triple clamp and dual-rate springs

Rear shocks: Coil-over with tri-rate springs
Front wheel: Black, split cast aluminum,
five-spoke: 2.50-19": optional

chrome, steel laced

Rear wheel: Black, split cast aluminum,

five-spoke; 4.50-17"; optional

chrome, steel laced

Handlebars: Riser with 2.4" of adjustment **Colors:** Vivid Black with medium red

pinstriping; Superior Blue with blue pinstriping; Deep Jade Pearl/Vivid Black with light green pinstriping; Billet Silver/Vivid Black with Burgundy pinstriping; Custom colors: Purple Fire/Blackberry Smoke with Proper Purple pinstriping;

Cosmic Blue Pearl **MSRP:** \$14,399-\$15,349



STREET BOB

Length: 94.3" (2395mm)
Seat height: 26.8" (680mm), unladen

Ground clearance: 4.7" (120mm) **Rake:** 29 degrees **Trail:** 4.7" (119mm) **Wheelbase:** 64.2" (1630mm)

Engine: Air-cooled, Twin Cam 103 (1690cc)

with rubber-mounted, blacked-out powertrain with polished highlights, nostalgic round air cleaner cover; optional Engine Idle Temperature

Management Strategy

Compression: 9.6:1

Fuel system: Electronic Sequential Port Fuel Injection (ESPFI)

Transmission: Six-speed Cruise Drive

Front tire: Michelin Scorcher "31" 100/90-19"
Rear tire: Michelin Scorcher "31" 160/70-17"

Fuel capacity: 4.7 gallons (17.8L)
Oil capacity: 3.0 quarts (2.8L)
Shipped weight: 637 pounds (289kg)

GVWR: 1,085 pounds (492kg) **Front brake:** Fixed four-piston caliper;

11.80" x 0.20" floating uniform expansion rotor; optional ABS

Rear brake: Floating, torque-free two-piston

caliper; 11.50" x 0.23" fixed uniform expansion rotor; optional ABS

Exhaust system: Chrome, staggered with tapered

mufflers

Front forks: 49mm with polished aluminum,

triple clamp and dual-rate springs

Rear shocks: Coil-over

Real SHUCKS. COII-OVE

Front wheel: Black, steel laced; 2.50-19"
Rear wheel: Black, steel laced; 4.50-17"
Handlebars: Stainless steel, internally wired

mini-apehanger

Colors: Vivid Black, Charcoal Pearl, Black
Denim, Crushed Ice Pearl, Velocity
Ped Supple Olive Cold Billet

Red Sunglo, Olive Gold, Billet Silver/Vivid Black with Burgundy pinstriping; Hard Candy Custom: Hard Candy Cancun Blue Flake

MSRP: \$13,699-\$14,449

SOFTAIL



Length: 94.1" (2390mm) Seat height: 26" (660mm), unladen

Ground clearance: 4.7" (120mm) Rake: 31.6 degrees **Trail:** 5.8" (147mm) **Wheelbase:** 64.2" (1630mm)

Engine: Air-cooled, SE Twin Cam 110B (1801cc)

with solid-mounted, counterbalanced, gloss black powertrain with SE Ventilator; optional Engine Idle Temperature Management

Strategy

Compression: 9.5:1

Fuel system: Electronic Sequential Port

Fuel Injection (ESPFI) with heated

0₂ sensors

Transmission: Six-speed Cruise Drive

Front tire: Dunlop Harley-Davidson 140/75-17" Rear tire: Dunlop Harley-Davidson 200/55-17"

Fuel capacity: 5.0 gallons (18.9L) Oil capacity: 3.5 quarts (3.3L)

Shipped weight: 709 pounds (322kg) **GVWR:** 1,160 pounds (526kg)

Front brake: ABS, four-piston caliper:

11.80" x 0.20" split, seven-spoke

floating rotor (300mm)

Rear brake: ABS, two-piston caliper;

11.50" x 0.23" solid, uniform

expansion rotor (292mm)

Exhaust system: Black over/under shotgun with CVO

Softail Deluxe mufflers

Front forks: 41.3mm, telescopic, "beer can" covers **Rear shocks:** Hardtail styling with hidden,

horizontally mounted, coil-over Front wheel: Black, cast aluminum, bullet hole

disc: 3.50-17"

Rear wheel: Black, cast aluminum, bullet

hole disc: 6.00-17"

Handlebars: Gloss black, low-profile 1.25",

internally wired, electric throttle control system with left-hand cruise

control

Colors: Vivid Black, Black Denim

MSRP: \$19,699, \$20,099



BREAKOUT

Length: 95.7" (2430mm) Seat height: 25.8" (655mm), unladen

Ground clearance: 4.3" (110mm) Rake: 35 degrees **Trail:** 5.7" (146mm)

Wheelbase: 67.3" (1710mm)

Engine: Air-cooled, High Output Twin Cam

103B (1690cc), with solid-mounted, counter-balanced, premium black and chrome powertrain with newly designed air cleaner cover with High Output 103 badge, Automatic

Compression Release

Compression: 9.6:1

Fuel system: Electronic Sequential Port

Fuel Injection (ESPFI)

Transmission: Six-speed Cruise Drive

Front tire: Dunlop Harley-Davidson 130/60-21"

Rear tire: Dunlop Harley-Davidson 240/40-18"

Fuel capacity: 5.0 gallons (18.9L) Oil capacity: 3.5 quarts (3.3L)

Shipped weight: 678 pounds (308kg) **GVWR:** 1,175 pounds (533kg)

Front brake: ABS, fixed four-piston caliper:

11.80" x 0.20" black, split, sevenspoke, floating rotor (300mm)

Rear brake: ABS, floating two-piston caliper;

11.50" x 0.23" black, split, sevenspoke, floating rotor (292mm)

Exhaust system: Staggered, straight-cut chrome

mufflers with gloss black muffler shields

Front forks: 49mm, telescopic

Rear shocks: Hardtail styling, hidden, horizontally

mounted, coil-over

Front wheel: Cast aluminum Gasser; 3.50-21" Rear wheel: Cast aluminum Gasser: 8.00-18"

Handlebars: Split Drag wide, low 1.25" drag-style;

electronic throttle control system; optional left-hand cruise control

Colors: Vivid Black, Charcoal Denim, Billet Silver, Crushed Ice Pearl, Velocity

Red Sunglo: Hard Candy Custom: Hard Candy Black Gold Flake

MSRP: \$18,799-\$19,999



SOFTAIL DELUXE

Length: 94.9" (2410mm) Seat height: 26.4" (670mm), unladen

Ground clearance: 4.3" (110mm) Rake: 32.1 degrees **Trail:** 5.8" (147mm) Wheelbase: 64.4" (1635mm)

Engine: Air-cooled, High Output Twin Cam

103B (1690cc), solid-mounted, counter-balanced, black powdercoated, chrome covers, Automatic Compression Release, new air cleaner cover/High Output 103 badge; Engine Idle Temperature Management option

Compression: 9.6:1

Fuel system: ESPFI, heated 0₂ sensors **Transmission:** Six-speed Cruise Drive

Front tire: Dunlop Harley-Davidson MT90-16" Rear tire: Dunlop Harley-Davidson MU85-16"

Fuel capacity: 5.0 gallons (18.9L) Oil capacity: 3.5 quarts (3.3L) **Shipped weight:** 701 pounds (318kg) **GVWR:** 1,160 pounds (526kg)

Front brake: ABS, four-piston caliper; 11.80" x 0.20"

solid, uniform expansion rotor (300mm)

Rear brake: ABS, two-piston caliper; 11.50" x 0.23"

solid, uniform expansion rotor (292mm)

Exhaust system: Chrome, straight over/under

shotgun with dual tapered mufflers

Front forks: 41.3mm, telescopic, "beer can" covers **Rear shocks:** Hardtail styling, hidden, coil-over Front wheel: Steel laced; 3.00-16"; optional

chrome aluminum profile laced

Rear wheel: Steel laced; 3.00-16"; optional chrome aluminum profile laced

Handlebars: Stainless steel, low rise, easy-reach

chrome pullback riser, electronic throttle control, cruise control

Colors: All: "Hologram effect" tank and

fender medallions, black paint fill; Vivid Black/medium silver pinstriping: Superior Blue/blue and medium silver pinstriping; Mysterious Red Sunglo/ Velocity Red Sunglo, medium red and Pale Gold pinstriping; Crushed Ice Pearl/Frosted Teal Pearl, gray and Teal pinstriping: Custom colors: Purple Fire/Blackberry Smoke, Proper Purple and Charcoal Metallic pinstriping: Cosmic Blue Pearl; Hard Candy

MSRP: \$18,549-\$19,749

Custom: Hard Candy Gold Flake



OFTAIL SLIM S

Length: 92.3" (2390mm) Seat height: 28.2" (665mm), unladen

Ground clearance: 4.9" (125mm) Rake: 32.1 degrees **Trail:** 5.8" (147mm) Wheelbase: 64.4" (1635mm)

Engine: Air-cooled, SE Twin Cam 110B (1801cc)

with solid-mounted, counterbalanced, powertrain with SE Stage I high-flow air cleaner

Compression: 9.5:1

Fuel system: Electronic Sequential Port

Fuel Injection (ESPFI) with heated

0₂ sensors

Transmission: Six-speed Cruise Drive

Front tire: Dunlop Harley-Davidson MT90-16" Rear tire: Dunlop Harley-Davidson MU85-16"

Fuel capacity: 5.0 gallons (18.9L) Oil capacity: 3.5 quarts (3.3L) **Shipped weight:** 682 pounds (309kg)

GVWR: 1,160 pounds (526kg) **Front brake:** ABS, four-piston caliper;

11.80" x 0.20" solid, uniform

expansion rotor (300mm)

Rear brake: ABS, two-piston caliper;

11.50" x 0.23" solid, uniform

expansion rotor (292mm)

Exhaust system: Black over/under shotgun with

CVO Softail Deluxe mufflers

Front forks: 41.3mm, telescopic, "beer can" covers

Rear shocks: Hardtail styling with hidden, horizontally mounted, coil-over

Front wheel: Black, steel laced: 3.00-16"

Rear wheel: Black, steel laced: 3.00-16" **Handlebars:** Hollywood with black triple clamp,

> riser, and handlebar clamp, electronic throttle control system

with left-hand cruise control

Colors: Vivid Black, Olive Gold Denim

MSRP: \$18,499, \$18,899



HERITAGE SOFTAIL CLASSIC

Length: 94.7" (2405mm) Seat height: 27" (685mm), unladen

Ground clearance: 4.7" (120mm)

Rake: 31 degrees **Trail:** 5.8" (147mm) Wheelbase: 64.4" (1635mm)

Engine: Air-cooled, High Output Twin Cam

103B (1690cc), solid-mounted, counter-balanced, black powdercoated, chrome covers. Automatic Compression Release, new air cleaner cover/High Output 103 badge; Engine

Idle Temperature Management option

Compression: 9.6:1

Fuel system: ESPFI, heated 0₇ sensors **Transmission:** Six-speed Cruise Drive

Front tire: Dunlop Harley-Davidson MT90-16" Rear tire: Dunlop Harley-Davidson 150/80-16"

Tire option: Wide whitewalls with laced wheels

Fuel capacity: 5.0 gallons (18.9L) Oil capacity: 3.5 quarts (3.3L) **Shipped weight:** 726 pounds (329kg)

GVWR: 1,160 pounds (526kg) **Front brake:** ABS, four-piston caliper:

11.80" x 0.20" solid, uniform

expansion rotor (300mm)

Rear brake: ABS, two-piston caliper: 11.50" x 0.23" solid, uniform

expansion rotor (292mm)

Exhaust system: Chrome staggered, shorty with

dual mufflers

Front forks: 41.3mm, telescopic, "beer can" covers

Rear shocks: Hardtail styling with hidden, horizontally mounted, coil-over

Front wheel: Steel laced; 3.00-16"; optional tubeless chrome aluminum profile laced

Rear wheel: Steel laced: 3.00-16": optional tube-

less chrome aluminum profile laced Handlebars: Ergonomic stainless steel, classic

> touring on chrome isolated riser. electronic throttle control, cruise control

Colors: Vivid Black, Superior Blue, Billet Silver, Olive Gold, Amber Whiskey/

Vivid Black/medium red and Pale Gold pinstriping; Crushed Ice Pearl/ Frosted Teal Pearl/gray and teal pinstriping; Custom colors: Purple Fire/Blackberry Smoke/Proper Purple and Charcoal Metallic

pinstriping; Cosmic Blue Pearl

MSRP: \$17,349-\$18,299



FAT BOY LO/SPECIAL

Length: 94.1" (2390mm) Seat height: 26.0" (660mm), unladen

Ground clearance: 4.7" (120mm) Rake: 31.6 degrees **Trail:** 5.8" (147mm) Wheelbase: 64.2" (1630mm)

Engine: Air-cooled, High Output Twin Cam

103B (1690cc), solid-mounted, counter-balanced, black powdercoated powertrain, satin-chrome covers, Automatic Compression Release, newly designed air cleaner cover with High Output 103 badge: optional Engine Idle Temperature

Management Strategy

Compression: 9.6:1

Fuel system: Electronic Sequential Port

Fuel Injection (ESPFI)

Transmission: Six-speed Cruise Drive

Front tire: Dunlop Harley-Davidson 140/75-17" **Rear tire:** Dunlop Harley-Davidson 200/55-17"

Fuel capacity: 5.0 gallons (18.9L) Oil capacity: 3.5 quarts (3.3L) **Shipped weight:** 704 pounds (319kg) **GVWR:** 1,160 pounds (526kg)

Front brake: ABS, four-piston caliper;

11.80" x 0.20" split, seven-spoke

floating rotor (300mm)

Rear brake: ABS, two-piston caliper;

11.50" x 0.23" solid, uniform expansion rotor (292mm)

Exhaust system: Denim black and satin-chrome

over/under shotgun with dual mufflers and muffler shields

Front forks: 41.3mm, telescopic, "beer can" covers **Rear shocks:** Hardtail styling, lowered, hidden,

horizontally mounted, coil-over

Front wheel: Black, bullet hole, cast aluminum disc: 3.50-17"

Rear wheel: Black, bullet hole, cast aluminum disc; 6.00-17"

Handlebars: Low profile, ergonomic 1.25",

internally wired, electronic throttle control system; optional left-hand

cruise control

Colors: Vivid Black, Amber Whiskey, Black

Denim, Charcoal Denim, Crushed Ice Pearl

MSRP: \$17,499, \$17,899



FAT BOY

Length: 93.9" (2385mm) **Seat height:** 26.4" (670mm), unladen

Ground clearance: 5.1" (130mm)

Rake: 31 degrees

Trail: 5.8" (147mm)

Wheelbase: 64.4" (1635mm)

Engine: Air-cooled, High Output Twin Cam

103B (1690cc), solid-mounted, counter-balanced, black powder-coated, chrome covers, Automatic Compression Release, new air cleaner cover/High Output 103 badge; Engine Idle Temperature Management option

Compression: 9.6:1

Fuel system: ESPFI, heated 0₂ sensors **Transmission:** Six-speed Cruise Drive

Front tire: Dunlop Harley-Davidson 140/75-17"
Rear tire: Dunlop Harley-Davidson 200/55-17"

Fuel capacity: 5.0 gallons (18.9L)
Oil capacity: 3.5 quarts (3.3L)

Shipped weight: 700 pounds (318kg)

GVWR: 1,160 pounds (526kg)

Front brake: ABS, four-piston caliper;

11.80" x 0.20" split, seven-spoke

floating rotor (300mm) **Rear brake:** ABS, two-piston caliper;

11.50" x 0.23" solid, uniform

expansion rotor (292mm)

Exhaust system: Chrome, over/under shotgun with

dual mufflers

Front forks: 41.3mm, telescopic, "beer can" covers **Rear shocks:** Hardtail styling with hidden,

horizontally mounted, coil-over

Front wheel: Mirror Chrome aluminum, bullet hole disc; 3.50-17"

Rear wheel: Mirror Chrome aluminum, bullet

hole disc; 6.00-17"

Handlebars: Low-profile, ergonomic 1.25", internally wired, giant knuckle

chrome riser, electronic throttle control system; optional cruise control Vivid Black, medium silver ninstrining

Colors: Vivid Black, medium silver pinstriping; Charcoal Pearl. black pinstriping:

Velocity Red Sunglo, medium red and Pale Gold pinstriping; Billet Silver/Vivid Black, Burgundy and Charcoal Metallic pinstriping; Custom colors: Purple Fire/ Blackberry Smoke, Proper Purple and Charcoal Metallic pinstriping;

Cosmic Blue Pearl

MSRP: \$16,699-\$17,649



SOFTAIL SLIM

Length: 92.3" (2345mm)
Seat height: 28.2" (655mm), unladen

Ground clearance: 4.9" (125mm)
Rake: 32.1 degrees
Trail: 5.8" (147mm)

Wheelbase: 64.4" (1635mm)

Engine: Air-cooled, High Output Twin Cam 103B (1690cc), solid-mounted,

counter-balanced, blacked-out powertrain, gloss black retro round air cleaner, Automatic Compression Release, newly designed air cleaner cover with High Output 103 badge; optional

Engine Idle Temperature Management Strategy

Compression: 9.6:1

Fuel system: Electronic Sequential Port

Fuel Injection (ESPFI)

Transmission: Six-speed Cruise Drive Front tire: Dunlop Harley-Davidson MT90-16"

Rear tire: Dunlop Harley-Davidson MU85-16"

Fuel capacity: 5.0 gallons (18.9L)
Oil capacity: 3.5 quarts (3.3L)
Shipped weight: 677 pounds (307kg)
GVWR: 1,160 pounds (526kg)

Front brake: Four-piston caliper; 11.80" x 0.20" solid. uniform expansion rotor

(300mm); optional ABS

Rear brake: Two-piston caliper; 11.50" x 0.23"

solid, uniform expansion rotor (292mm); optional ABS

Exhaust system: Chrome, over/under shotgun with slash-cut mufflers

Front forks: Chrome 41.3mm, telescopic, "beer can" covers

Rear shocks: Hardtail style with hidden,

horizontally mounted, coil-over **Front wheel:** Black, steel laced; 3.00-16"

Rear wheel: Black, steel laced; 3.00-16"
Handlebars: Hollywood, retro style, internally

wired with cross brace, electronic throttle control system; optional left-hand cruise control

Colors: Vivid Black, Charcoal Pearl, Black Denim, Velocity Red Sunglo, Olive Gold; Charcoal Satin/Vivid Black

Satin with gray pinstriping

MSRP: \$14,899-\$15,649

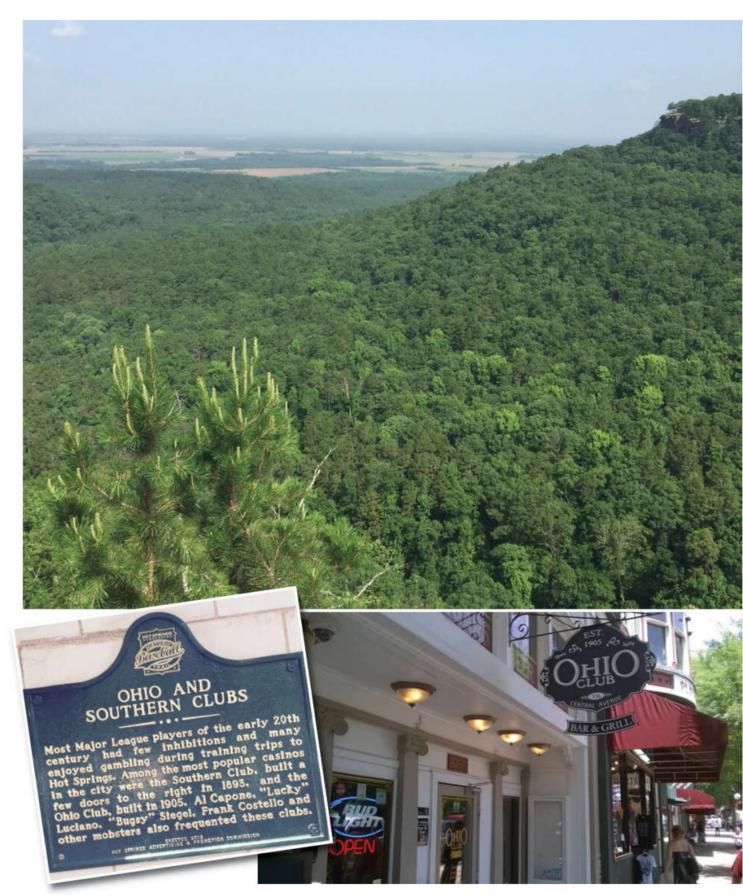
support cruise control, although only the Heritage Classic, Deluxe, Fat Boy S, and Slim S come standard with that handy open-road device. However, cruise control is optional on the remaining Softail models.

And as tough as it is to change a model appropriately called the Heritage Classic, Harley found a way to update that vintage-style Softail just enough to give it some modern flair. In addition to cruise control and the High Output upgrade, the Heritage Classic receives new trim, including conchos with red starburst inserts on the saddlebag lids and a seat skirt to match the tank badge. The Heritage's saddlebag redesign includes structural support to help maintain its shape through normal use, and a variety of new paint schemes are available to give the tried-andtested FLSTC a fresh look for 2016.

The 2016 lineup also brings back another favorite among Harley's touring-bike enthusiasts: the 2016 Road Glide Ultra, last year available only as a CVO model. The RG Ultra shares the same aerodynamic, framemounted sharknose fairing as found on the FLTR and FLTRX, but uses a 13-1/2" windshield and 1.9" taller handlebars for a more conventional riding position. The Ultra has fairing wind deflectors for improved aerodynamics and fairing lowers that double as radiator mounts for the Twin-Cooled High Output 103 engine, which is good for 105.5 ft-lbs. of peak torque. Touring amenities include saddlebags and Tour-Pak, an amply padded seat with full passenger back support, and Dual Reflector Daymaker LED headlights. With all those features, it's understandable that, in the words of Motorcycle Product Planning Director Paul James, "Road Glide Ultra riders rack up more miles per season than owners of any other Harley-Davidson model.

Year after year, Harley's CVO division puts out some of the boldest and most extreme long-distance motorcycles on the planet. The CVO Limited, CVO Road Glide Ultra, and CVO Street Glide return for 2016, but there's no cruiser model as in past years. The feeling among the people on Juneau Avenue in Milwaukee is that enthusiasts looking for high-perfor-

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Arkansas Four-Day Thrill Ride

Exploring the scenic highways and byways in the Valley of the Vapors

HIS MOTORCYCLE ADVENTURE ORIGINATED from a conversation my riding brother Rick Wong and I had in Florida. This was going to be a 3,000-mile, eight-day journey from Tampa, Florida, to Hot Springs, Arkansas, and back. Just the two of us and our Harleys on the open road to a place Native Americans called the Valley of the Vapors, so named because of the steam created by 143 F thermal springs flowing out of the ground.

As we planned the trip, we found that you can still soak in the thermal waters on historic Bathhouse Row in Hot Springs, and this quant historic town offers many options for lodging, restaurants, and shopping. As the trip drew closer, our other riding friends wanted to join us. The plan was to base ourselves in Hot Springs, making different rides each of the four days we would be there.

When we finally set out, I was on my 2013 Harley CVO Road Glide Custom and Rick rode his 2010 CVO Street Glide from Arkansas. We would be joined in Hot Springs by four friends: Dave Vargas, Fred "Big Dog" Schatz, Tampa's Cliff Roberts, and Doug Nash, who rode in from Cincinnati. Rick, Fred, and I arrived one day earlier than the rest of the group, giving us a day to ride before meeting the others that evening for dinner.



Day 1: The Petit Jean Mountain Climb

IT'S HARD TO IMAGINE HOT SPRINGS AS A HOTBED FOR organized crime, such as gambling, prostitution, and bootlegging. But in the 1930s, Al Capone, "Lucky" Luciano, and other infamous mobsters frequented this secluded location, an ideal hideout from the law. We would hold up there for four days.

Our first day riding out of Hot Springs brought warm temperatures with sunny skies as we headed north along Arkansas Highway 7 (Scenic 7 Byway) to the Ouachita (wah-shi-tah) Mountains, the largest mountain chain between the Rockies and the Appalachians. After leaving town on 7, we entered pine and hardwood Ouachita National Forest. What began as gentle sweeping curves became more intense as we rode, and I was grinning ear to ear. We leaned hard through a series of tight hairpin curves, rapidly climbing and descending steep elevation changes. We stopped at Nimrod Dam, built in the 1940s to control flooding along the Fourche La Fave River, as well as create Nimrod Lake. Arkansas had received large amounts of rain the month we were there, so the dam's floodgates were opened. It was an amazing sight, water shooting out to the river below. Our two-wheeled fun continued on Arkansas Highway 154 up Petit Jean Mountain to Petit Jean State Park. The view is spectacular from the mountaintop, and in the distance, we watched the Arkansas River meander through the valley between the Ozark and Ouachita mountain ranges. We could see for miles from this vantage point on the rugged cliffs overlooking the valley below. The loop back to Hot Springs on Arkansas Highway 9 winds out of the valley and into the foothills of the Ouachitas; 9 southbound is a twisty road that runs through heavy pine forests. The curves are fun, but not technically difficult. Soon 9 turns into Arkansas Highway 5 west, its gentle sweepers directing riders to 7 and Hot Springs.

That evening, Dave, Doug, and Cliff met us at the Bleu Monkey Grill. It had been a long time since we had all seen each other, and even though a huge thunderstorm knocked out power to the whole town, we continued to party until the storm passed.

Day 2: North to Mt. Nebo

THE NEXT MORNING, WE HEADED NORTH AGAIN ON 7, BUT this time, our destination was Mt. Nebo, which rises 1,350' above the Arkansas River Valley. Nebo treats visitors to commanding views of Lake Dardanelle, the Arkansas River, and the surrounding mountain ridges. In the town of Dardanelle, we caught Arkansas Highway 155 to Mt. Nebo. On the map, it looks like a jagged line leading up the mountain. Nothing prepared us for what we were about to experience. With plenty of switchback turns, 155 is a steep gravel road. I would've never attempted to go up this road on a motorcycle had I known what it was like to ride. It's one switchback after another, getting steeper and steeper as we climbed. There was no turning back once we started, clawing our way





IT'S MORE THAN A RIDE, IT'S A 75 YEAR PILGRIMAGE.





TOUR

up the road and hoping that we all would make it. Arriving at the summit in one piece, we admired the view for awhile, knowing there was only one way down that mountain.

Safely down 155, we headed south on Arkansas Highway 27 towards Hot Springs where we experienced another Arkansas thrill ride. We streaked up and over mountain ridges with beautiful scenery along the way. Roads like this make you want to ride them twice: once to enjoy the more rapid pace and once again to enjoy the scenery at a more moderate pace. We arrived in Hot Springs in the early afternoon, where we enjoyed an impromptu pool party at our hotel. It was very hot, so that night, we dined poolside on pizza, later relaxing in the pool's cool waters until it was closed at 11 pm.

Day 3: The South Loop

ANOTHER SUNNY DAY GREETED US AS WE HEADED SOUTH through the Hot Springs Historic District on 7. Right out of town, we crossed a long bridge over the sparkling waters of Lake Hamilton, one of three reservoirs that surround Hot Springs. Upscale homes dot the shoreline, and many boaters could be seen enjoying the lake. Soon we reached DeGray Lake, its 208 miles of shoreline making it a prime destination for Arkansas anglers, while the dam itself provides flood control and hydroelectric power for the surrounding area. Continuing on 7, we left the Ouachita Mountains' foothills for flatter topography before stopping in Fordyce for lunch at Red's Restaurant.

Leaving Fordyce, my internal GPS malfunctioned, so I — along with the rest of our posse — missed the turn for US Route 167 to Arkansas Highway 229, which was going to take us back to Hot Springs. I had been doing so well with directions that my techie friends had turned off or ignored their GPS devices altogether. Eventually, I realized we'd missed our turn, at which point Rick's GPS

reconnected us with 229, an enjoyable ride through farmland, small towns, and finally back to Hot Springs. We cleaned up and went to Fisherman's Wharf Steak & Seafood, a restaurant on Lake Hamilton, which we had passed during our ride. The lakeside restaurant has outside seating, where we dined while watching a parade of boats on the brilliant blue water. The restaurant has a great atmosphere, and the seafood is top-notch. After dinner, Rick, Doug, Dave, and I headed to the historic district to explore downtown, while Cliff and Fred turned in early.

Day 4: Mystery Ride

OUR FINAL DAY WAS RESERVED FOR EXPLORING ROADS NORTH of Hot Springs. We took 7 north one final time, stopping again at Petit Jean State Park to explore a few side roads. We had lunch downtown at BubbaLu's Bodacious Burgers & Classy Dogs. The highlight was a long soak in the hot springs at the Fordyce Bathhouse. There are four different pools inside with water temperatures varying from 98 F to 104 F. We went from pool to pool, relaxing and indulging in a long, hot mineral bath — a great way to end the trip.

The next morning, Rick and I headed out on our 1,000-mile ride back to Tampa, Florida. We took our time, taking Interstate-40 east to Memphis, Arkansas, to catch the Natchez Trace Parkway in Tupelo, Mississippi, to Jackson. The next morning, we headed to Mobile, Alabama, taking Interstate-10 across the panhandle to Florida's Big Bend, US Route 98 through Port St. Joe and Apalachicola, stopping for the night in Perry. The next morning, only 170 miles stood between us and home, and wouldn't you know, it started to rain for the first time during the entire trip. The intermittent rain actually felt good, keeping us cool during the ride on US Route 19 from Perry to Crystal River. And by the time we reached home, Rick and I already began laying plans for our next motorcycle adventure! AIM

SOURCES

ARKANSAS DEPARTMENT OF PARKS & TOURISM

501/682-7777

Arkansas.com/Motorcycling

BLEU MONKEY GRILL (HOT SPRINGS)

501/520-4800

BleuMonkeyGrill.com

BUBBALU'S BODACIOUS BURGERS & CLASSY DOGS

501/321-0101

HotSprings.org/Places/BubbaLus-Bodacious-Burgers-and-Classy-Dogs

FISHERMAN'S WHARF STEAK & SEAFOOD

501/525-7437

Facebook.com/Pages/Fishermans-Wharf-Steak-Seafood

HOT SPRINGS NATIONAL PARK: FORDYCE BATHHOUSE VISITOR CENTER

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NPS.gov/Hosp/PlanYourVisit/Fordyce.htm

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The 75th Sturgis Rally—The Million-Dollar Baby

The Black Hills classic thrills a million enthusiasts

he 75TH STURGIS RALLY HAPPENED TO BE MY first Sturgis rally. For years, I'd heard that a big part of experiencing the rally is in making the journey to it on two wheels, carrying only what you need for the week. It's a liberating experience to travel like that, making for a great start and finish to any rally. In fact, it's the way that Harley-Davidson Museum's Vice President Bill Davidson, plus countless other enthusiasts, have been getting to the rally in the Black Hills for years.

For the historic 75th Sturgis Rally (keep in mind, it's not an anniversary date because the rally hasn't been held for 75 years in a row, due to World War II), Bill and The Harley-Davidson Motor Company wanted to make this a special year for the Milwaukee brand. So their celebration began last January with the announcement of the historic 75-year agreement between The Motor Company and the city of Sturgis, making Harley-Davidson the city's official motorcycle. Two months later, several daring H-D employees and a few motojournalists, myself included, embarked aboard Harley-Davidsons for a 900-mile trek from Milwaukee to Sturgis through snowy conditions to commission the new Harley-Davidson Rally Point plaza at the junction of Main Street and the newly formed Harley-Davidson Way (issue #325). Our group shared the transport of 75 original factory bricks from Juneau Avenue to begin construction of the Rally Point.

But The Motor Company wanted to do even more to commemorate the 75th Sturgis Rally. Bill wanted to celebrate his namesake brand's history — and future — with Sturgis by increasing the size and scope of his annual ride to the Black Hills. So in addition to him, his sister Karen Davidson, and the usual few friends who make the annual trek, this year's ride included about 20 other H-D executives, plus a handful

of motorcycle media (yep, yours truly was included again) for a three-day run starting at the H-D Museum in Milwaukee, culminating at the H-D Rally Point in downtown Sturgis for the beginning of the rally (August 3-9).

Our group arrived in Rapid City at about the same time the rally had shifted into high gear. Local radio reports along the way mentioned that nearly half a million people were expected. Ironically, many of the early arrivals had already left, enjoying the relative calm of the week before the rally to enjoy the surrounding countryside and sites. In fact, several in our group made a side trip to Mitchell where we checked out the world's only corn palace. We also took time to visit famous bike builder Brian Klock's Klock Werks shop and showroom just down the street.

And speaking of celebrities, none other than Willie G, accompanied by his wife, Nancy, joined our group outside Sturgis August 7 for the final ride into town to celebrate the Rally Point's official chain-cutting ceremony. Our police escort, riding Harleys of course, led us nonstop through town to Main Street. A crowd backed up as far as we could see and parked in a cordoned-off area at the Rally Point greeted us. Notice how I didn't say "ribbon-cutting ceremony"? No, this "ribbon" was actually a chain composed of links of metal plates shaped like

the Bar & Shield logo. The "ribbon" was cut using — what else? — a cutting torch. And that, ladies and gentleman, is how I began my first-ever Sturgis.

Clearly though, the biggest news from this year's rally was the attendance figure. Leading up to the event, estimates pointed to more than one million who would ride to the Black Hills. The streets were packed with motorcycles, especially those wearing the famous Bar & Shield. There was so much American iron on those streets that when I walked the mile from our magazine's rental house to Main Street, I made faster progress than the motorcycles inching forward along the same route. And for safety's sake, South Dakota's highway department temporarily lowered the speed limit on Interstate-90 from 80 mph to 55 mph when approaching and leaving Sturgis. Interestingly though, the actual traffic in Sturgis wasn't as thick as what greeted bikers at the 60th rally in 2000, which saw a max of 110,488 vehicles (out of total attendance of 633,000) in one day ride into town. The maximum number of vehicles entering Sturgis in a day this year was 96,409. One likely explanation for this discrepancy is that many people chose to go it on foot like we did. The other factor might be the Buffalo Chip's massive rise in popularity over the last 15 years, prompting many bikers to avoid town altogether.

What better way to kick off any Sturgis Rally than to attend Michael Lichter's annual Artistry In Iron exhibit at the

















EVENT

Buffalo Chip? And that's exactly what I did, attending the evening industry party on August 9. The exhibit's theme was Naked Truth, which showcased motorcycles sporting raw metal tins and body panels, revealing the true "soul" of each bike. More than one featured builder in the exhibit commented that showing a bike in raw metal required more work than usual to eliminate unsightly imperfections that paint otherwise conceals.

City Park, which used to be ground zero for rally goers 40 or 50 years ago, was open this year to vendors and bike shows. Featured events included the Roland Sands Design display and bike show, Harley stunt riders, and The Motor Company's new "youth-oriented" display, consisting of some wild looking custom Street 750s, Dark Customs, and a killer Airstream trailer. Live music all day, great barbecue, and light crowds made it a prime place to stop. Just like the old days, I'm told.

Moving up Lazelle Street, The Beaver Bar and Full Throttle Saloon were packed every day, offering the kind of entertainment that's associated with Sturgis and some parts of Mexico, but that's another story. For daytime entertainment, the bars and restaurants on Main and Lazelle offered concerts, food, drink, and a relaxing way of taking in your surroundings.

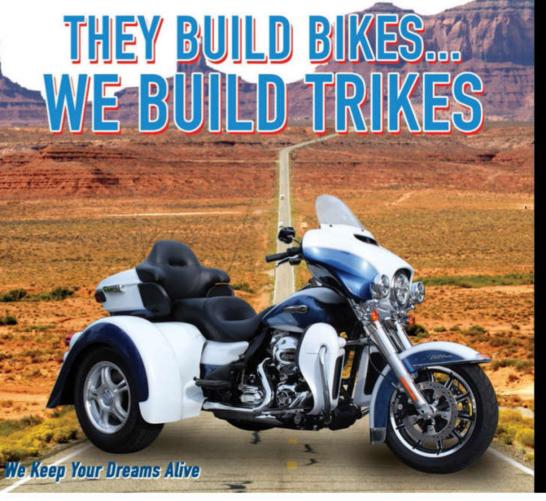
Sadly, just a month after the rally, the legendary Full Throttle Saloon burned down. An investigation revealed that an electrical cord behind a keg cooler was the cause of the fire. Luckily, there were no casualties. As of this writing, owner Michael Ballard is unsure of whether or not he'll rebuild the world's largest biker bar. Well, there's always Daytona ...

Yearly, rally goers may have noticed, and it's tough not to, the massive addition to Black Hills Harley-Davidson, which doubled its footprint to handle the annual onslaught of retail and service customers. If parts and accessories for your bike are your thing, the Black Hills parking lot hosted a myriad of vendors selling everything from shocks to speakers and every custom part and convenient knickknack in between.

While Harley-Davidson may be the official motorcycle of Sturgis for the next 75 years, Indian and Victory aren't letting that stop them from making their presences felt. Several parking lots on Lazelle Street were devoted to the two Polaris brands, which displayed new bikes, customs, stunters, and Polaris Slingshot drifting shows.

August 4 brought about the culmination of our magazine's week-long celebration of the Indian Motorcycle Company's storied history with the Sturgis Rally. For those who need a refresher course, the Sturgis Rally was founded in 1938 by the local Indian-riding Jackpine Gypsies who hosted annual races in the Black Hills. American Iron Magazine kicked off this year's celebration when Editor-In-Chief Buzz Kanter, riding his 1948 Indian Chief, joined other Indian riders to make the trek from Indian corporate headquarters in Spirit Lake, Iowa, to the rally. Everybody met Tuesday at the Buffalo Chip's free Crossroads event compound where AIM hosted the Indian Motorcycle & Classic American Iron bike

continued on page 115



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TWILIGHT ZONE BUILD

A first-time bagger for entering a new dimension

I FEEL LIKE I'M IN THE TWILIGHT ZONE. THAT OR IT'S THE next stop, and the signpost up ahead reads "Rob Angevine's wife had him stop riding his bike, but not in the way you'd expect." The bike in question is a 2003 Softail Classic. The 2008 Electra Glide Classic you see here comes later.

Cue Rod Serling's *Twilight Zone* opening narrative: "You are about to enter another dimension, a dimension not only of sight and sound but of mind. A journey into a wondrous land of imagination. Next stop, the Twilight Zone!"

Our story begins with a Softail that had a pretty crucial role to play: fulfilling Rob's lifelong dream of one day owning a Harley. The reason why Rob - who's been around the block a few times — waited so long to get his hands on some American iron is because his hands were already busy running his two auto service compa-



nies in Collingwood, Ontario. One of those businesses, Master Mechanic, has been in operation since 1985. He also ran a 100-acre farm and owned and raced Clydesdale horses. All this while raising two sons and two daughters. And one of his kids happened to be a motocross racer (Rob was his son's race mechanic), taking on the dirt for about eight years. "He was racing motocross and snowboarding, and I was one of his coaches in hockey," Rob recalls. "I said 'Okay, pick two out of three." Motocross was one of the picks, and Rob's son ended his enduro career with a bang by taking ninth place at the Walton TransCan GNC Motocross national championship. Yeah, Rob's hands were full.

That pretty much explains why Rob never got a Harley. But once the motocross adventure was over, Rob's wife suggested that he buy the Harley-Davidson he had always wanted. Cue in creepy *T-Zone* intro music.

It also helped that a lot of Rob's friends ride Harleys. "Once my son quit racing, they were bugging me to get a bike," says Rob. "In any event, it was the best thing I ever did." In 2007, after he found the bike "at a Hyundai car dealership of all places" with only about 800 miles on it, Rob

finally could experience the

joys of riding a good ol'

horse from The

But then

that other

dimension

stuff started

happening.

"After two

Motor Company

But once
the
motocross
adventure
was over,
Rob's wife
suggested
that he buy
the HarleyDavidson
he had
always
wanted.

months, my wife rode on the back with me, and she said she'd like to learn to ride." What rider would pass on that opportunity? So Rob got her a little 125. "She rode that for about a month. She then got a G2 [the equivalent of passing the US Basic RiderCourse], and then she hopped off that 125 and went straight to operating that Softail and never looked back." Rob was left standing in the dust.

Once again, Rob found himself without a Harley. "And I wasn't going to ride that 125," he laughs. Whether it was the impact of being knocked off the Softail or not, Rob decided to get a bagger. He selected a 2008 Electra Glide Classic in November 2007. To gather some ideas on how to modify his new ride (he's an auto mechanic after all), he sought inspiration from American Iron Magazine's late sister publication, Motorcycle Bagger.

Every time Rob turned the page of that bagger magazine, something caught his eye, prompting him to emulate on his Electra Glide whatever he'd seen in the magazine. That explains why his bike has gone through, as Rob calls it, various stages. And with each stage, the bike's parts became more and more intense. But as Rob's wife often said during the building process, "Good thing you're not a plastic surgeon cuz the kids wouldn't recognize them."

ary process began when
Rob went straight to
the mother ship,
HarleyDavidson, for
the bolt-on
chrome
components
"like the



skulls and all that." This also included installing CVO chrome wheels. But then Rob saw that builders featured in the magazine were jacking up the wheel size. So he went with a 21-incher up front. He also took this time to remove the boxy Tour-Pak to make his bagger sportier.

It didn't take long for Rob to start making sense of the cacophony that constitutes the bagger industry; all of the brand names began popping out, and soon Rob could connect the dots, associating what he liked with what certain manufacturers offered. He was especially swayed by Bad Dad, Paul Yaffe's Bagger Nation, Sinister Industries (now Dirty Bird Concepts), and Pickard USA. "Literally, when you put their products down, there are only a few minor adjustments to make, like the gaps between your fender and your bags. They [specialty companies] get all the bugs out, and it becomes pretty much bolt-on."

But let's back up a bit. Rob was first drawn into the bagger fray by Bad Dad. "I loved their back end, so the next winter, I talked to Scott over at Bad Dad and changed the whole back end." Hence the Competition stretch bags (4-1/2" down, 7" back) and Competition rear fender with Covington Custom Destroyer pipes. After flipping through a few more *Motorcycle Bagger* issues, Rob felt his front hoop was still too small, so he upped to a 23" Renegade Tahoe, which is, yes, supported by Pickard 23" triple trees with 6-degree trail. Rather than mirror the Bad Dad rear fender completely, he stuck with the Pickard name, installing its High Roller front fender. And, of course, there are various Yaffe parts — 10" Monkey Bars, mirrors, and fork covers — and Sinister components — side covers, horn cover, and

Got a bike you think belongs here? well, send it to

ReadersRide@AmericanIronMag.com or Reader's Ride, c/o American Iron Magazine, 1010 Summer Street., Stamford, CT 06905. Be sure to send a few digital images showing both sides of the bike shot the same way we do a bike feature, as well as some shots of you with the bike. We'll also need full contact info for you, including a daytime phone number. Sorry, images will not be returned.

He sought inspiration from AIM's late sister publication, Motorcycle Bagger.

windshield. On the other end of the spectrum, Rob also knows Christine Smith, owner of XESS Leather in Meaford, Ontario, so he set one of her leather saddles on his ride, too.

The paint job is the work of Vince Goodeve from Owen Sound, Ontario. Look closely at the graphics and you'll see two ravens, which represent both Rob and his wife flying down the road. Fittingly, her Softail is also black. In regards to how the concept came about, Rob explains: "I had the idea of the ravens, so I printed out a bunch of different pictures of ravens landing and flying." Then he took these photos to Vince, who incorporated the theme into the bike's paint. When Rob came back to the shop, he was blown away. "He took the tarp off the tank, and it was just amazing!" Luckily, this isn't one of those Twilight Zone episodes where the protagonists would, in this case, somehow physically transform into the painted ravens on the bike.

For performance, Rob installed a Screamin' Eagle Super Turner before taking the bagger to Fox Harley-Davidson to be dyno'd. This raven, with nearly 50,000 miles showing on the odometer, soars with 73 hp and 83 ft-lbs. of torque. "For my first attempt with designing baggers," says Rob, "I like it"

As for the Softail? Well, as of this writing, Mrs. Angevine has logged about 50,000 miles with it. "I can't get her off it," says Rob. "It's unbelievable. It's amazing to have your partner love what you love to do." Best *Twilight Zone* episode ever. **AIM**



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BIKER'S CHOICE REBUILD

Part IV: Upgrading the rear shocks to Progressive Suspension 444s

AGGER

Our opening shot

1998 Road King

jacked up just

enough to take

rear wheel.

shows the rear of our

weight off the bike's

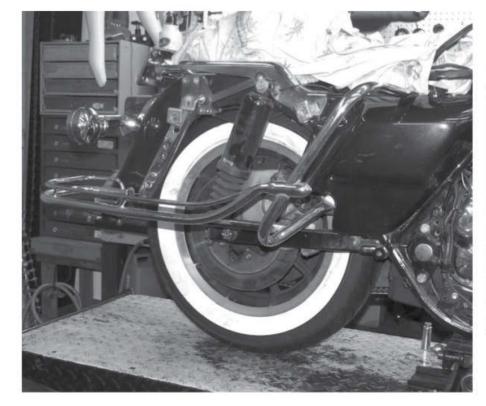
LATE-'90S EVO ROAD KING IS ONE OF THE best values in used motorcycles out there today. They're dependable, look great, sound amazing, and don't have any modern computers, sensors, or gadgets to worry about. Our 1998 Road King rebuild project is rolling smoothly on all new wheel bearings and tires from the Biker's Choice catalog. These late-'90s bikes are the last basic Harley-Davidson Big Twins. A carburetor, ignition, and the occasional greasy hand are all it takes to keep this thing running. However, this bike's nearing two decades of service, with most Evos already well past that number, and it needs a few odds and ends to make it good as new to provide another 20 years of fun.

Thanks to the huge support for these bikes from the aftermarket, just about all of which can be ordered directly from Biker's Choice, we're able to not just rebuild, but significantly improve our Road King. We've already built up the rear end with new swingarm bushings from Custom Cycle Engineering, which will increase rigidity and let our King track better.

To further improve the ride over stock, while at the same time making a necessary parts replacement, we're installing a set of all-black Progressive Suspension 444 series rear shocks (#77354/\$624.95) with optional heavy duty springs. The 444s are highpressure, gas-charged shocks with a progressive spring rate and deflective disc damping for smooth, consistent performance. They use Progressive's Frequency Sensing Technology (FST), which senses the frequency of a bump and automatically adjusts the damping to suit. They're made in the US, and don't require any special tools for preload adjustment, just your hand. We got ours in the stock 13" length, but with heavy duty springs, since this bike will often be seeing gear and a passenger. Progressive recommends its

TOOLS NEEDED

- Blue Loctite
- 1/2" deep socket
- 3/4" socket
- Torque wrench (ft-lbs.)





Chuck starts the upgrade by assembling the new Progressive all-black 444 rear shocks. First in is the supplied top shock sleeve. It doesn't matter which side of the shock it goes in.







Chuck then does the same for the bottom sleeve and bushing. Make sure you have the sleeve flat on the same side of the shock as the top one.



Chuck then replaces the stock flat washer on both the top and bottom shock mounting bolts with the ones supplied in the Progressive kit. He reuses the stock bolts and lock washers.



You can just tie the old air lines out of the way or remove them. We remove the rearmost air valve using a 1/2" deep socket, since that's the one for the rear shocks on this year and model bike.



To remove the stock air line from the top of the stock shock, Chuck pushes down (in) on the red collar and then pulls the black air line out of the collar and shock.



Chuck then slips the stock top bolt (with blue Loctite), stock lock washer, and Progressive flat washer, into the top of the Progressive shock. Note the Progressive sleeve's shouldered end (arrow).



Chuck pulls the air line from the valve the same way he removed the air line from the top of the rear shocks.



Using a 3/4" socket, Chuck removes the stock top shock bolt, followed by the bottom one. Save the stock hardware for reuse on the new shocks.



After Chuck installs the top bolt, he does the same for the bottom bolt setup. Chuck then torques both bolts to 35–40 ft-lbs. using a 3/4" socket. He then does the same for the other shock.



He then disconnects the old air lines for the rear shocks from the bike at this T-fitting.



Here's how the new blacked-out Progressive Suspension shocks from Biker's Choice look on our 1998 Road King project.

HD springs if you run a passenger and lots of gear more than half the time or if the rider weighs over 250 pounds, otherwise the regular springs will be fine.

The Progressive 444s have a bunch of different choices for our Road King, and they're also available for just about every Harley out there. We could have gotten our shocks in chrome, and in a range of sizes from 11-1/2" to 13-1/2".

As with our entire Road King rebuild project, Chuck at Chuck's V-Twin in Port St. Lucie, Florida, is spinning wrenches for us to bring this worn-in motorcycle back to, and beyond, its showroom self. Stay tuned for further installments on this project, and take a look at the accompanying photos and captions to see what's involved in a shock swap on an Evo tourer. **AIM**

SOURCES

AlMag.com

BIKER'S CHOICE

BikersChoice.com

CHUCK'S V-TWIN 772/807-1810 ChucksVtwin.com



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JIMS COMPRESSION RELEASES ON A SHOVEL

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IG-INCH, HIGH-COMPRESSION ENGINES CAN BE A lot of fun and provide a motorcycling experience that simply can't be duplicated. You feel the torque twisting through the frame and into your body as the roar of unadulterated horsepower reverberates all around you. With each gear of the built transmission the muscles in your arms tighten from the newfound acceleration as you're launched forward at a rate way beyond that of a stock Harley. Before you drop this rag and head out to the garage to fire up that beast (or go sit on it making "braaap" noises for those of us currently in northern climates), there's one key step required for riding a hi-po V-twin: getting the damn thing started.

Those new to the world of high-performance motors might raise an eyebrow, but starting one of these monsters, especially one with high compression, is different than firing off a stock bike. Depending on the engine package, even a more powerful starter motor can be put to the test. If you're kicking, fuhgetaboutit! That's why engine builders use compression releases built into the cylinder heads when they build performance engines. Even Harley's Screamin' Eagle 110" Twin Cam, found on CVOs and S models, uses compression releases.

In the process of building up a stroked, bored, high-compression Shovelhead motor, it came time to install a set of com-

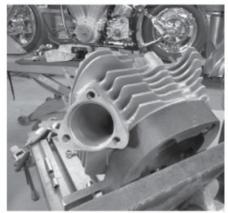
chose a set of JIMS 10mm compression release valves (#727K/\$109.35), which are for all Twin Cams, Sportsters, and Buells. However, they'll also work on Shovelheads, as you'll see in the accompanying photos and captions. To operate, simply push the control button to let some of the compressed air inside the cylinder vent out the head for easier starting. Installation is straightforward, and

pression releases. For our Shovel, we

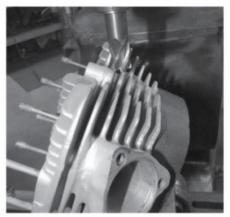
made even easier thanks to the tools that JIMS offers for sale. For this Shovelhead, we used JIMS tapping tool (#1169-1/\$58), which makes the correct threaded M10x1.0 hole in the cylinder

TOOLS NEEDED

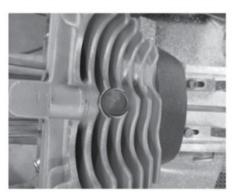
- 13/16" mill bit
- · Letter T (or 0.3579") drill bit
- 13mm deep socket
- Tap T-handle
- Torque wrench (ft-lbs.)
- S&S mill plate ■



Here's our Shovel cylinder head on Billy's mill with the naked head bolted to a S&S plate that's used for milling heads or cases. The plate is set at 65 degrees, which is the same as the angle of the stock spark plug.



The first step is to spot-face the head at a position even with the center stud for the rocker box. Billy is using a 13/16" mill bit and is aiming for the tip of the first full cooling fin under the stud.



Billy goes only as deep as needed to get a flat surface on the side of the head, and no deeper. This will place the compression release right between both valves in the sidewall of the hemi combustion chamber.

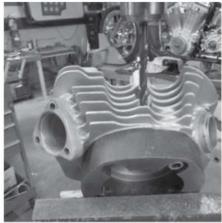


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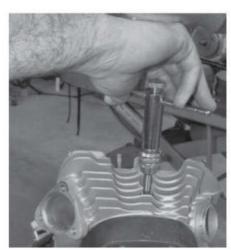




Once Billy has a 0.3579" (or a letter T) drill bit in the mill, he drills a hole in the center of his flat spot all the way into the combustion chamber.



Billy then swaps out the drill bit for the 10mm tap that comes with the JIMS kit. He uses the mill, which he spins by hand, to get the tap started straight in the hole.



He can now use a regular tap T-handle and some cutting oil to thread the hole he made all the way through. He then removes the head from the mill platform and S&S plate.

head. This tool works with all Sportster and pre-Twin Cam motors. Twin Cams require a different tool package.

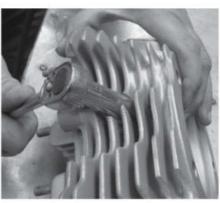
Billy at Departure Bike Works expertly walks us through the process of clearing the fins, drilling and tapping the hole, and installing the compres-



After using compressed air to remove all the shavings from the assembled head, here's what he has so far (arrow).

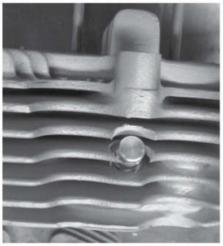


Billy then slips a few aluminum banjo bolt washers onto the JIMS compression release to act as spacers and sealing washers. Do not put any antiseize or Loctite on the release.



Billy installs the release using a 13mm deep socket. He torques the release to 12-18 ft-lbs.

sion releases in the accompanying photos and captions. Once that's done, Billy will be using Cometic head gaskets to install these heads onto our hipo Shovel engine. Cometic makes head gaskets for all sizes of H-D engines, even our 103" big-bore monster!



Here's how the installed release looks in the head, between where the two pushrod tubes will go.



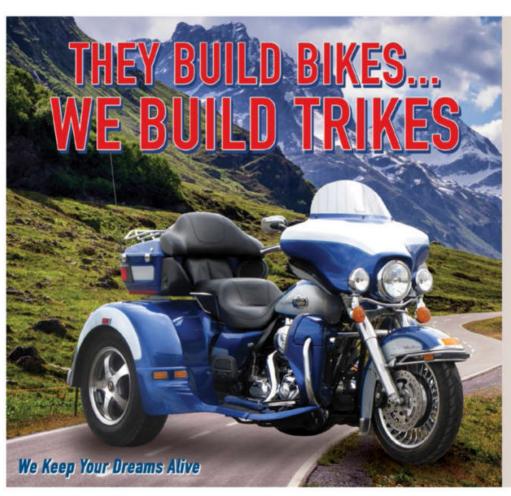
Here's how the business end of the JIMS compression release looks in the combustion chamber (arrow). Billy can now clean and reassemble the head. AIM

SOURCES

COMETIC GASKET 440/354-0777 Cometic.com

DEPARTURE BIKE WORKS 804/231-0244 Departure.com

JIMS MACHINE 805/482-6913 JimsUSA.com

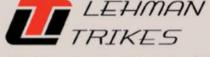


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FAT BOY UPGRADES

Part IV: Installing a H-D chrome Freight Train headlight nacelle

Our 2015 Fat Boy is up on the lift with its original headlight assembly, risers, and triple tree covers removed. The handlebars have been carefully positioned on the gas tank for now. There are thick towels on the gas tank and front fender to protect them and battery's ground cable has been disconnected.

HE CLASSY CHROMED-OUT HARLEYS OF THE 1950s are iconic representations of the classic American motorcycle that fill anybody's heart with nostalgic gooeyness. That's even for those of us who didn't come along until much later. In case you haven't noticed, our 2015 Fat Boy project is receiving a healthy dose of the shiny stuff, but with a noticeably modern twist to give this classically styled Harley a look all

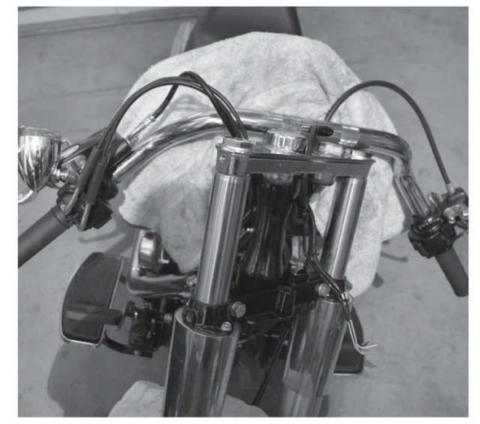
The chrome headlight bucket and three-stripe fork cover is a retro take on something a '50s-era Harley would sport. No doubt, the chrome fits the bike well, but we want to modernize our Fat Boy a little bit, say, to the '60s. One of the most obvious ways to do that is to dump the stock headlight treatment in favor of the Freight Train Headlight Nacelle kit (#67907-96C/\$449.95) from the Harley-Davidson Parts & Accessories catalog.

The beefy one-piece nacelle pumps up the Fat Boy's front end like it was on steroids. The menacing locomotive look mates well with the bike's Fat Bob gas tank, wide disc

wheels, and 200mm rear tire while keeping with the bike's overall retro appeal. It's just, well, retro to a different decade. From a rider's perspective, the longer one-piece nacelle stretches the cockpit to create a somewhat "warp

TOOLS NEEDED

- Blue Loctite
- · Wire cutter
- Wire stripper
- Crimping tool
- Phillips screwdriver (small)
- Phillips screwdriver (#2)
- T-27 Torx
- 3/16" Allen
- 1/4" Allen
- 5/16" Allen
- 7/16" wrench
- 3/4" socket (deep)
- Torque wrench (in-lbs.)
- Torque wrench (ft-lbs.)





We start by installing a set of H-D brushed aluminum risers, which are required when installing this nacelle kit. We reuse the stock riser bushings, lock washers, flat washers, and nuts. Just snug the nuts for now.

REAR FENDER: BAD DAD'S SUMMIT REAR FENDER BAGS: BAD DAD'S STRETCHED BAGS LIGHTS: 992 TAILLIGHTS License Plate: premium plate frame wiring: plug-n-play wiring harness color: amber whiskey

REAR FEMILER BAD DAD'S SUMMIT REAR FENDER BADS BAD DAD'S STRETCHED BAGS LIGHTS 957 TAILLIGHTS License Date - Premium Plate Frame Wirnig - Plug-N-Play Wirnig Harness - Color Charcoal Pearl



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Slip the kit's supplied flat washers over the supplied riser cap bolts. Then position the stock handlebars on the riser bases.



Now use a 3/4" deep socket to torque the riser nuts to 30-40 ft-lbs. Then pull on the bars and make sure they do not move in their risers.



Position the right nacelle half on the triple trees and slip one of the kit's chrome flat washers between the nacelle cover and lower triple tree. Then loosely secure the nacelle using a 5/8" bolt setup and a 3/16" Allen.



After centering the bars on the riser bases, using the knurled marking on the bars as a guide, install the riser caps using the supplied hardware and a 1/4" Allen. Just snug the bolts for now.



Insert the nacelle kit's eight supplied well nuts into the holes in the nacelle halves, shoulder side facing forward on the nacelle.



Slip the nacelle kit's supplied chrome lock washers and flat washers onto the kit's chrome 7/8" bolts, so they're ready to use for the next step. Yup, they also get some blue Loctite on the bolt threads.



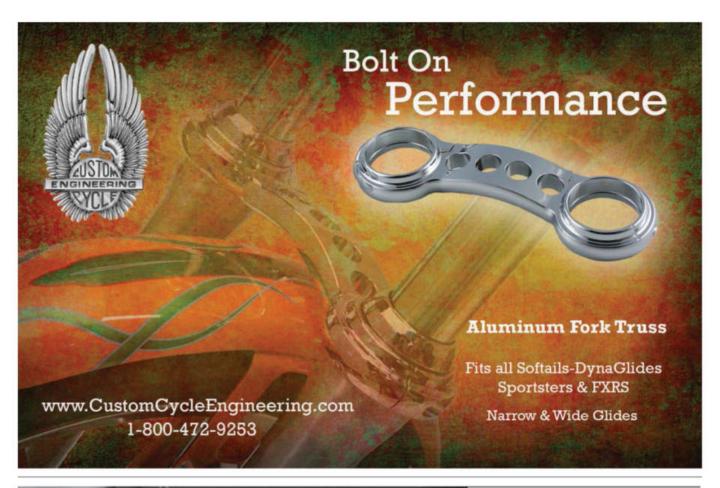
Sit on the bike and position the bars so they're comfortable for you. Then, while keeping the gaps on both sides of the riser caps the same, lock down that position by torquing the four riser cap bolts to 12-16 ft-lbs.

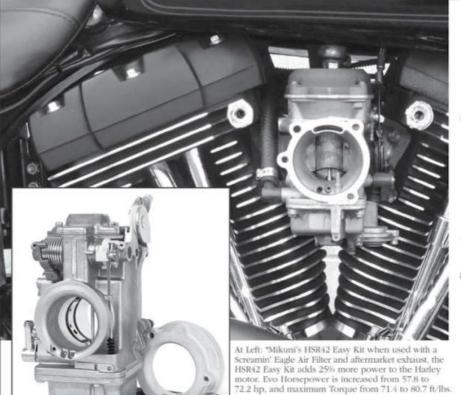


Slip the nacelle kit's supplied chrome lock washers and flat washers onto the kit's chrome 5/8" bolts, so they're ready to use for the next step. Also put some blue Loctite on the bolt threads.



Loosely secure the top of the nacelle to the top triple tree using a 7/8" bolt setup and a 3/16" Allen.





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Is the stock CV carburetor on your 1990 and later Harley-Davidson Evolution or Twin Cam motor now worn out and running poorly, in need of a major rebuild or replacement? Well now you have no more excuses. This is perfect time to step up to the renown Mikuni HSR42 Carburetor.*

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Mio.ni HSR42 Easy Kit bolts right on to replace the stoo



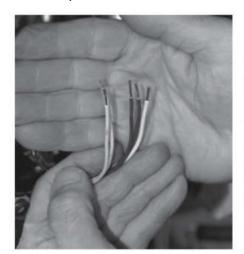
Do the same for the left nacelle half and make sure they join together with no gaps. Then tighten all four bolts to 100–120 in–lbs. using the 3/16" Allen.



Now secure the front brake line to the back of the right nacelle half using the original clamps and hardware. The bolt heads go outside the nacelle.



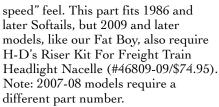
After positioning the handlebar cover over the risers, use a 3/16" Allen and the supplied hardware to secure the cover to the top triple tree. Torque the bolts to 100-120 in-lbs. Then reinstall the stock headlight assembly.



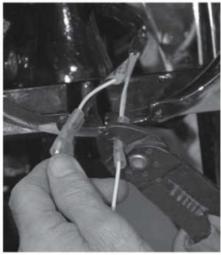
Using a wire cutter, cut the stock headlight wires directly behind the headlight connector. Then use a wire stripper to remove about 3/8" of insulation from all the wires.



The flat washers and locknuts go inside the nacelle. After making sure the brake line will allow full movement of the front end, tighten the hardware using a T-27 Torx and 7/16" wrench.



Now we have our Fat Boy looking fresh and smooth from back to front with the chrome Layback license plate holder, which we installed last month and the new chrome Freight Train nacelle. But we're not done with this H-D P&A project just yet! Stay tuned for another install in the next issue: a H-D 7" Daymaker Reflector LED headlight. But for now, take a look at the accompanying photos and captions to see how all it takes is an afternoon to jump your Fat Boy's look back to a previous decade. **AIM**



Using the kit's supplied wire connectors and a proper crimping tool, attach the bike's two black wires to the new headlight connector. The bike's two yellow wires go to the single yellow: and then white to white.



Slip the kit's supplied handlebar cover chrome lock washers and flat washers onto the kit's chrome 5/8" bolts. Then put some blue Loctite on the bolt threads.

SOURCES

THE HARLEY-DAVIDSON MOTOR COMPANY Harley-Davidson.com



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BOOM! RADIO ISSUES, RIM SEALS & MOTOR SHUTDOWNS

Is the radio on your Boom!-equipped bike acting like it has a poltergeist? Does it keep switching itself to the radio setting whenever you start the bike? It's probably a software issue. Make sure vou have the latest version (1.19.1) loaded in the system.

I have a 2014 FLHTK that I bought new. I've had 13 new ones. My problem is with the Boom! Box 6.5GT audio system. It never stays on the USB setting. Sometimes it goes to The Weather Channel or to FM when I turn it back on. Even if I have the radio off and start the bike up, the radio comes on. I've had four factory downloads, and it seems to get worse.

> **DENNIS S. CULLEN** Clyde, OH

What software version is in your radio now? The latest is 1.19.1. Media not playing after the ignition cycle is one of the fixes in this update. The Motor Company knows of the issues, and software is being updated constantly to improve the performance of the



To submit a question to our H-D-certified mechanic, who has been working in dealerships for over 20 years, send in as much info about the problem and bike as possible to Hog Helpline, c/o American Iron Magazine, 1010 Summer Street, Stamford, CT 06905, or e-mail ChrisM@AmericanIronMag.com. Sorry, but due to volume, we cannot respond to requests for personal replies or to all letters.

sound system. As the calibrations have been upgraded, I've seen some radios lose some functionality while other problems were fixed. I've spoken to the factory guys on some of these issues, and I'm usually told they're aware of the issues and a fix is in the works. Next thing I know, a new calibration is available online. I have a 2014 FLHXS that had similar problems. The radio would do whatever it wanted when I turned the bike on. The latest calibration on mine seemed to fix it. Make sure you have the 1.19.1 software installed. If it is, try installing it again to be sure the original update wasn't corrupted.

I have a 2012 FLHRC with chrome-laced Profile wheels. These are tubeless rims using a rim seal to seal the spokes. When I bought new stock Dunlops from a local dealership, the guys there couldn't get the rear tire to seal. And after the third try, they installed a tube. I've heard that's a bad idea because it causes the tube to wear prematurely from overheating, chaffing, etc. Should I worry or will this combo work? I tried finding info on the net, but I've never found a good answer.

BOB LANDWERMEYER

Ft. Worth, TX

The easy answer is don't run that wheel without the rim seal installed! The Factory Service Manual clearly states to never install a tire and inner tube on a laced rim with **Tubeless and MTM designations** etched into the rim. These rims are specially designed for tubeless use only. It also says to replace the rim seal whenever the tire is removed.

The tubed wheel rim has a different part number from the rim using the rim seal. Both rims use the same tire, so the tubeless rim has a slightly smaller diameter at the bead area to accommodate the thickness of the rim seal. Without the rim seal, there won't be enough tension on the bead, and the tire can slip on the rim. This can cause the valve stem to shear off the tube and cause rapid air loss and loss of control of your bike.

What also worries me is why your dealer isn't able to figure out why the rim seal wasn't working. The seal needs to be changed with each tire change, and you have to make sure the seal stays in place as the tire is mounted. The rim has to be nice and clean under the seal and the edges can't get folded over. It should stretch over the rim snugly and lie smoothly against the bead surface.

I purchased a 2005 FLTRI new, but I've been having a problem for over two years: the motor shuts down when I stop after idling for a few seconds. This happens mostly when the air is hot and there's high humidity.

There are no codes generated to indicate an issue. It restarts immediately with no other issues. The mileage on the bike is about 76,000. The additions are Stage I air cleaner, 95" kit, and, after returning from South Dakota last summer, the dealer installed a Pro Super Tuner. None of the several tuning and dyno sessions have fixed the problem. Other than the intermittent shutdowns, the bike runs good and strong and gives me 47-51 mpg. Last week, I had the tech increase the idle to about 1100 rpm. This seems to have helped, but I can still feel the motor trying to shutdown.

> STAN YEATON Strong, ME

With that kind of mileage, Stan, I'd be looking at the throttle plate shaft in the throttle body. These shafts can crack at the screw hole that holds the plate in place. Sometimes they'll cause the engine to idle high and sometimes the engine will stall. Engine vacuum will move the throttle plate to a different position than the throttle position sensor (TPS) sees. In your case, vacuum may be closing the plate too much, and the engine stalls before the idle air control (IAC) can open it up to allow enough air to keep the engine idling. I would think after two years, the condition would've gotten to the point where the shaft is completely broken, but it's easy to pull the air filter and inspect the shaft. While the air cleaner assembly is off, look at the throttle stop screw on the lower front part of the throttle body. The head of the screw is under a cap, but you can see where it protrudes and contacts the throttle crank behind the cap. Grab this part of the screw lightly with some needlenose pliers. If the screw is loose and turns easily, it may have vibrated out of adjustment and is allowing the throttle plate to close in the wrong position. You'll need to have your dealer reset the screw to the proper throttle position sensor voltage so the throttle plate rests in the correct position.

Having said that, I would also check for intake seal leaks. If either of these issues are the problem, you have to have the engine retuned after the needed repairs are made. AIM





Rear mounts & Ethanol



Dan, please explain the rear motor mounts on the Ironhead Sportsters? There are multiple part numbers and I'm not sure what fits my 1958. Also, what is the best one to use?

ALLEN GREENWOOD

Via Internet

These stock four-bolt. as well as the two-bolt, aluminum rear motor mounts are prone to cracking. However, Pingle makes a quality aluminum allov rear motor mount that fits all Sportsters and K models from 1952 to 1981.

Allen, there are two different stock rear engine mounts used on the early kickstart XLs that use four bolts to connect the engine mount to the top of the tranny case section of the crankcases. Both mounts look the same, but one is made from cast aluminum and will crack over time. The other mount looks the same, but it's made from cast steel and, though it can rust, will last forever.

In 1967, the rear engine mount was redesigned (#16203-67) and uses two bolts to connect the mount to the top of the tranny case section of the crankcases. I believe the change was made to allow the addition of an electric starter. The new mount is made from cast

aluminum, has two bolts to connect the mount to the top of the tranny case section of the crankcases, and is also prone to cracking, just like the earlier four-bolt aluminum mount. This two-bolt mount was, unfortunately, used until early 1982.

Sometime in early 1982, frame changes caused the two-bolt rear engine mount to be redesigned again and mount #16203-82A was born. This version is also made of aluminum, but, so far, it isn't suffering from cracking problems as bad as the earlier cast aluminum mounts are. Unfortunately, this mount cannot be retrofitted onto the earlier Sportster applications.

Now for some good news: there's a replacement rear motor mount available for the early four-bolt and two-bolt cast aluminum mounts, which are prone to cracking. The folks at Pingle make a quality aluminum alloy rear motor mount (#RM2) that will fit all Sportsters and K models from 1952 to 1981. This mount is not only strong, it has stood the test of time in both street and racing applications. Another benefit is that, unlike the stock units. it also allows for easy removal and replacement of the rear motor mount without tearing down and splitting the engine cases! Neat, huh?

Dan, is there any new information on the alcohol added to the fuel(s) we buy at the pumps?

PAUL

Via Internet

Yes, there's a lot going on with the fuel/gasoline we buy at the pumps that the end user needs to be aware of. My sources have explained

Got a question about a problem on your Sportster? Send your query, with as much info on the bike as possible, to American Iron Magazine, Sportster Corner, 1010 Summer Street, Stamford, CT 06905, or e-mail it to ChrisM@AmericanIronMag.com. Sorry, but due to volume we cannot respond to requests for personal replies or to all letters.

that the main additive put in unleaded fuel at the refinery pre-2007 was MTBE. Methyl tert-butyl ether is an organic compound molecular formula (CH3)3COCH3. MTBE is a volatile, flammable, and colorless liquid that is sparingly soluble in water. It has a minty odor vaguely reminiscent of diethyl ether, leading to an unpleasant taste and odor in water. MTBE is a gasoline additive, used as an oxygenate to raise the octane number. Its use is controversial in the US and declining in use in part because of its occurrence in groundwater and legislation favoring ethanol. However, worldwide production of MTBE has been constant at about 18 million tons per year (2005) owing to growth in Asian markets, which are less subject to ethanol subsidies.

It's great for the application and also worked well with various octane boosters for bikes requiring higher octane fuels. The problem with using MTBE is that it can leach into the groundwater, so the government mandated that a substitute be found. The end result of this mandate was that an ethanol additive was selected, and that was how we ended up with alcohol in

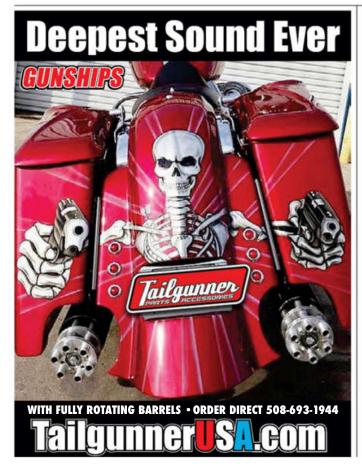
our fuel. A few problems with alcohol additives are alcohol is hygroscopic and blends with any water at the bottom of storage tanks. The problem is if the station, transporter, or terminal doesn't maintain their tanks you can get some real crap for fuel! Oh, by the way, the fuel pick-ups at the gas station are normally located near the bottom of the tank, where water collects. Another problem most people are unaware of is that the EPA has mandated that 10.21 percent of all fuels used must be biodiesel or ethanol enhanced. It also monitors refiners and blenders, and if, at the end of the year, they fall below the 10 percent mandate they must buy RIN credits to reach the 10.21 percent limit or face fines, etc., from the government. What this means to you, the end user, is a price increase at the pumps.

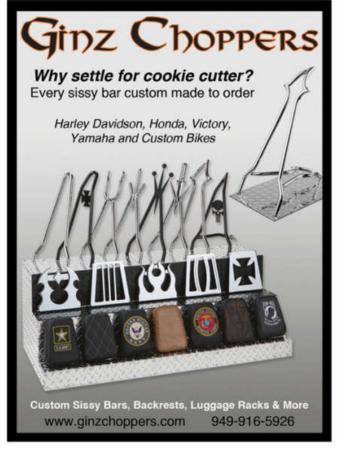
What is a RIN credit? Companies that blend gasoline for the retail market are obligated to include a quantity of biofuels equal to a percentage of their total sales of gasoline. For 2009, the EPA has set the Renewable Fuel Standard (RFS) at 10.21 percent. This percentage is computed as the industry total amount of ethanol,

biodiesel, and renewable biodiesel that is mandated to be used in 2009 as a percentage of expected total gasoline use. The company uses this percentage and its gasoline volume to compute its mandated biofuels volume. When the biofuel is actually blended into gasoline (or diesel fuel in the future), the blender turns the RINs into the EPA to show compliance with the company's portion of the RFS or biofuels mandate. One RIN credit equals one gallon and used to cost 9 cents. Lately, as credits are harder to get and many are coming from pirate suppliers, the cost, unfortunately, could increase up to \$1 per credit. Yep, this equates into a higher price at the pump.

Another thing you should know is that all fuel terminals receive two different octane fuels — 84 octane and 91 octane — from the pipeline delivery. The terminals just add 10 percent ethanol to them and end up with the 87 octane (regular) or 93 octane (premium) fuel we buy at the pumps.

Dan Umstead D&S Performance Lake City, PA





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This lift consists of a diamond plate steel platform and allsteel frame. It operates via a hydraulic foot pump, so no air compressor or power source is required. You can raise your ride to a max height of 29-1/2" or use the integrated leg lock

to safely adjust the height at various levels in between. Casters on all four corners allow you to move the lift easily even when your bike's strapped onto it. Retract the front casters and the lift stays put. A removable diamond plate steel ramp provides easy access to the work platform. Just make sure the front casters are retracted before you roll your bike on.

A 7"-wide tire stop keeps your bike from rolling off the lift and an adjustable tire chock keeps the bike in place. U-hooks on both sides of the work platform, front and back, allow straps (not included) to be attached. Use them!

Overall this Pittsburgh Motorcycle Lift works great. It's a solid, economical way to get your bike projects off the garage floor. Unless, of course, you prefer to work harder not smarter. If so, I recommend a good pair of knee pads and some strong painkillers. AIM

SOURCES

HARBOR FREIGHT HarborFreight.com

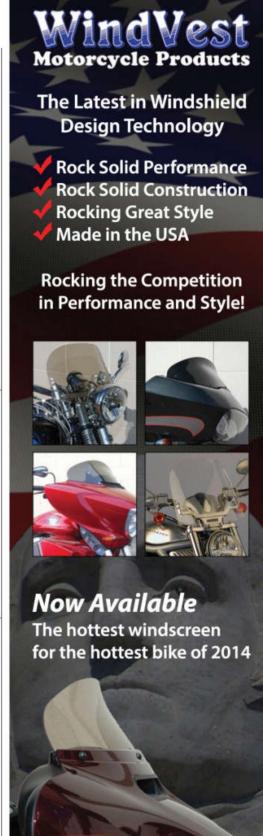


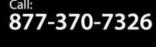














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WING WALKER As far back as I can remember, I've always had a dream about wing walking, so last winter, after my bike was put away, I decided to search online and found that West Coast Spin Doctors offered wing walking. Well, my mind was made up, and I vowed to do just that this summer. I booked my wing walking course and decided to take a little 12-day Harley ride through the western states ending up in Sequim, Washington, for my course. My dream came true and I got to experience wing walking on a 450 Stearman biplane. To say the least, I was not disappointed!

> **JASON LUSSIER** Kamloops, BC



Got a bike you think belongs here? If so, send a few high-resolution (300 dpi at 8" x 8" minimum) images to Letters@AmericanIronMag.com or American Iron Magazine, 1010 Summer Street, Stamford, CT 06905.



WRECKED OPPORTUNITY After a 1984 Ironhead Sportster and a 2006 Night Train, I figured it was time to give a bagger a try, and found this 2013 Road King available for sale. A bit banged up from a low-speed drop by a new rider, I saw the opportunity for a good deal and an immediate excuse to hit the catalogs to clean it up. A Screamin' Eagle exhaust, a few

blacked-out parts from Drag Specialties, and some H-D parts for the motor are the start. Looking forward to many rides with my wife, Shannon, through the Sierra Nevada foothills. Keep up the great work in the magazine!

KEITH PIERCEVia Internet
AIM



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Dyna & V-Rod rue-Track™ units also available



Capsulating Display

The Bike ShowCase not only shelters your bike from dings, dust, dirt, corrosion, mildew, musty odors, and pests, but it also displays it in a show-quality presentation. The structure is supported by inflatable air columns and features a front zipper panel, allowing the motorcycle to be ridden in or out. The air inside is exchanged with filtered outside air eight times every hour. The inside version Bike Show-Case features clear, durable 10 mil PVC panels and a 18 mil reinforced base mat that is mildew-, abrasion-, and flame-resistant, as well as impervious to oil and gas. Simply attach the included high-pressure air pump, and the Bike ShowCase inflates in less than 90 seconds. Info: CarCapsule, 219/945-9493, CarCapsule.com.

Armed And Ready

Motorcycle Armor is an optically clear polyurethane film that's engineered to cover and protect the vulnerable



painted surfaces of Harley-Davidson motorcycles. In addition to keeping your bike's painted

surfaces looking new, Motorcycle Armor incorporates a clearcoat-style chemical in the film adhesive that fills most scuffs and scratches to make previously damaged paint appear new again. Also available in a matte version for denim-style finishes, easy-to-install paint protection kits are made in the US and contain film sections that are cut to exact specs for a precision fit. Info: Motorcycle Armor, MotorcycleArmor.com.

All claims and specifications are those of the manufacturers. Submissions are welcome and should include a color digital (300 dpi jpeg) image, detailed description, and suggested retail price. Send submissions to Widgets. American Iron Magazine. 1010 Summer Street, Stamford, CT 06905, or Widgets@AmericanIronMag.com.

Travertson V-REX

The Travertson V-REX is a departure from traditional motorcycle design, based on the Revolution (V-Rod) engine and proprietary body and chassis. The bike's gas tank or "backbone" is the large central casting directly in front of the rider. It joins the cast single-sided rear swingarm to the motor and subframe, which supports the steering arm and front fork. The geometry of the front end allows for more finessed shock absorption control over the ground. The composite body panels are produced at Travertson for optimal strength and finish. Power is put to the ground through a final belt drive into a Metzeler 280/35X-18". Info: Travertson, 954/763-2283, Travertson.com.

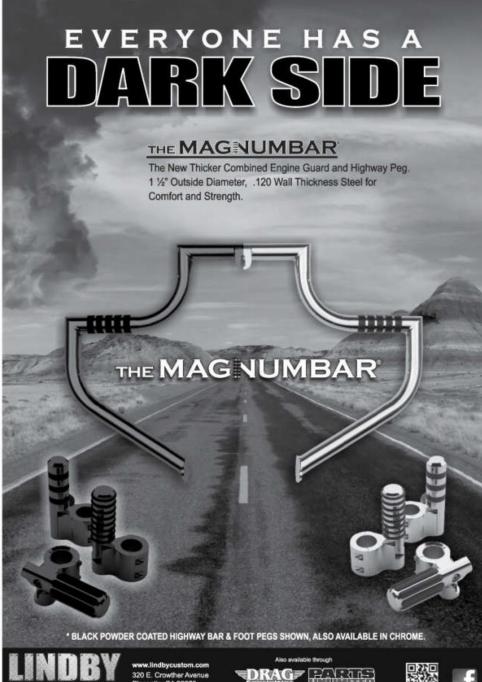




Complementary Rods

Performance Machine (PM) introduces a complete line of shift rods to its line of accessories. Designed to complement PM floorboard and forward control packages, these shift rods are a great addition to any motorcycle. CNC-machined in the US, the shift rods include Drive, Grill, Hole Shot, Merc, Scallop, or the stand-alone Superlight. They're available in chrome, Contrast Cut, and Black Ops finishes and fit 1986 and later FXST and FL applications. \$139.95. Info: Performance Machine, 800/479-4037, PerformanceMachine.com.





WIDGETS



Big Wheel V-Rod

Hawg Halters Inc. (HHI) introduces its new custom 55mm triple trees for V-Rod motorcycles with an inverted front end configuration. Designed to perform, these HHI triple trees are made of billet aluminum and can be ordered in black, machine, or brilliant chrome finishes. The three rakes offered by HHI allow for the proper building of a V-Rod trike conversion (4 degree), a 23" wheel upgrade on a two-wheel V-Rod (6 degree), and a 26" wheel upgrade on a two-wheel V-Rod (8 degree). HHI billet triple trees are 40 percent stronger than a stock cast triple tree. Info: Hawg Halters Inc., 877/442-5837, HawgHalters.com. **AIM**



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1911 READING STANDARD





have for more than 100 years now, held a special allure for pioneer motorcyclists as well as present-day vintage enthusiasts. It was at the turn of the last century that a fledging motorcycle company known as Reading Standard manufactured its bikes in the eastern Pennsylvania town, and the factory not only tested its machines for quality and endurance in the hills around Reading, but used the line "Tested in the Hills"

as a selling point and badge of honor for Reading Standard's craftsmanship and the bikes' sturdy dependability.

History is also deeply rooted in the Oley Valley, which borders Reading to the east. The rolling hills and winding roads that meander along the Schuylkill River and Manatawny and Pine creeks are a rider's dream. The roads rise and twist to mirror the river's and creeks' bends. Historic covered bridges that are over 150 years old link the river's east and west banks, and the pale blue sky reflects itself in the gently moving water's deep pools and swirling eddies.

Each spring, the Antique Motorcycle Club of America (AMCA) starts the year in this part of the country when Oley hosts a meet in the very hills where the Reading Standards were tested back in the day. Having been on past Oley road runs, riding an old flathead with its valves pounding, lifters chattering,

and exhaust cadence rhythmically lulling me into a trance toward yesteryear, I could sense the magic in those grand old hills and what it must have been like road-testing a new Reading Standard here at the beginning of the 20th century. I suspect that on a beautiful, warm spring day, the testers never really wanted to return to the factory, wishing instead to just keep on riding till they ran out of road, ran out of light, or ran out of gas. It's that amazing a place.

Our featured motorcycle is an original paint 1911 Read-

ing Standard belonging to Steve Klein, my favorite Texan who, like me, is addicted to old motorcycles and whose appreciation of the art and function of these machines is bigger than the Texas sky. We've featured other machines from Steve's collection, each one special and distinct, in previous issues of *AIM*. As Steve was building his collection, he sought rare and unique machines with fascinating histories and unmatched originality. This 1911 Reading Standard is one such example, and is considered by experts to be the

most original example of its kind today. From its wonderful brown enamel paint with orange inserts, to its nickel plating and hand-laid pinstripping, this machine is extraordinary. Even the rear tire is original from the factory! And the sound that the engine emits, its old single cylinder huffing with measured rhythm and swirling parts will instantly steal your heart.

According to Steve, the Reading Standard story began in 1903, and the company's original foray into motorcycling consisted of a knock-off design of the early Indian motorcycle, its motor sourced from the Aurora Automatic Machine Company. Other turn-of-thecentury motorcycle manufacturers employed similar motors until such time as they developed their own in-house designs. Reading Standard went on to pioneer its own side-valve flathead engine under the direction of Charles F. Gustafson, who later gained fame as the

Indian Motocycle Company's chief designer. That new sidevalver is credited as being the first American-made flathead, a design that, by the way, Harley-Davidson continued using until 1973 in its Servi-Car models. Charles is also credited with developing the Indian Powerplus motor, a popular engine based on the side-valve/flathead design. Some of his detractors named the new Powerplus design the Indian Standard, a tip of the hat to what came before it.

Jerry Hatfield wrote in his terrific book Standard Catalog



of American Motorcycles 1898-1981 that among the Reading Standard's greater achievements was winning the 1906 Pikes Peak race, an annual event that pits man and machine against the famous Peak. This was a big deal in its time, and for many years thereafter, Reading Standard used that win to promote its brand.

The factory continually searched for more power and displacement, and eventually a V-twin motor layout

followed. Such improvements through the years kept Reading Standard moving forward, although production numbers were limited compared to Harley, Indian, and Excelsior, the big three brands of the day. But Steve points out that the handmade quality of each Reading Standard was indicative of the work ethic and care of eastern Pennsylvanian craftsmen during that period. The attention to detail, the style and grace of the castings, and the fit and finish

speak volumes about the machines and the men who built them.

The late teens proved to be the zenith for motorcycle manufacturing in this country when output peaked. By the early 1920s, though, demand for motorcycles waivered and production fell; the beginning of the end was on the horizon for many smaller manufacturers like Reading Standard. By 1922, the small Pennsylvaniabased company sold out to the Cleveland Motorcycle Manufacturing Company, and by 1924, Reading Standard was discontinued. Quietly and almost unnoticed, another great brand slipped into history. Sadly, Cleveland closed its doors in 1929, itself a victim of the Great Depression and the changing transportation tastes of the American public.

It's refreshing to think that this machine has survived in original condition for more than a century. And with worthy custodians like Steve and others to come, it will survive another 100 years for future generations to admire, study, and appreciate. **AIM**







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show sponsored by National Cycle. Our event saw not only a variety of vintage and new Indian motorcycles, but a handful of beautiful Harley Shovelheads and Panheads.

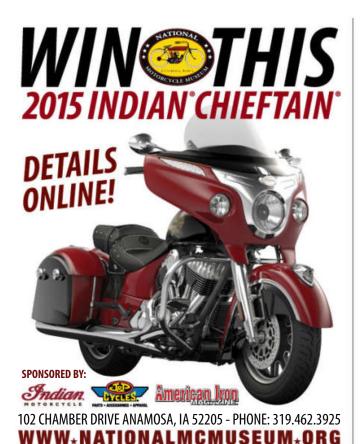
The Crossroads at the Buffalo Chip was also home to the Rat's Hole Custom Bike Show on August 6. This show always brings out some of the craziest customs imaginable, mixed with some of the most beautiful and some of the raunchiest bikes to roll on asphalt. To give you an idea of what some people can come up with, one bike was powered by four — yes, four — 100" RevTech V-twin engines. My question: did the owner need four different keys to start those engines?

The Rat's Hole show was followed by the Editor's Choice Bike Show at the Broken Spoke Saloon. As the name suggests, the Editor's Choice show allows magazine editors to pick and choose winners. The show stems from the fruitful mind of our friend and colleague Chris Callen. It's an opportunity to put home-built custom bikes in front of the biggest grouping of magazine editors in a single place. Nearly 40 custom bikes formed a semicircle around the north side of the Spoke's huge swimming pool, where the editors from 13 magazines made their top picks. On a side note, congratulations to Chris and his bride, Heather, who celebrated their wedding at Sturgis before setting off on an 18-day, two-wheel honeymoon.

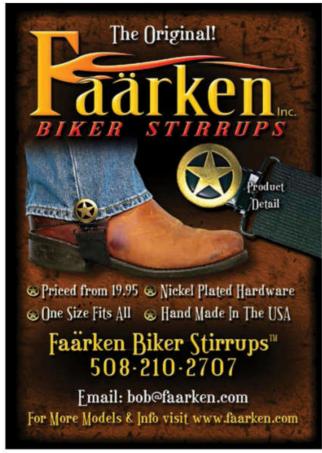
Usually, the ride home from a rally can be anticlimactic, but my 800-mile trek back to Wisconsin was just as fun as getting to Sturgis. See, I rode a 2015 Harley-Davidson Limited there and back, which, as I pointed out in the beginning of this report, allowed me to travel with all my belongings packed with me. That in turn let me do something that I didn't get to do enough of while in the Black Hills, ride. With all the incredible happenings, events, shows, and goings-on during the rally and this year's insane traffic, I filled up the bike's gas tank only once during the whole week! As busy as rallies can be for motojournalists like me, Sturgis offered me the incredible freedom of living off a bike for 12 days, rain or shine, hot or cold. And to me, that was the best part of the 75th Sturgis Rally. **AIM**



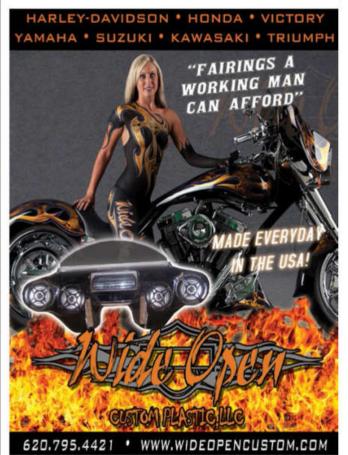




The National Motorcycle Museum is a non-profit 501(c)(3) corporation.







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mance cruisers can choose from the two S series Softails, and at much more affordable pricing.

Besides all-new paint and accessories to distinguish the 2016 CVOs, the high-end models have a tire pressure monitoring system (TPMS) integrated into the wheels' valve stems to keep the rider informed about tire pressure. A low-pressure warning display pops up on the Boom! Box screen if the tire pressure drops too low.

Another nifty new CVO feature is an integrated key fob that engages the ignition system and electronically locks and unlocks the luggage locking system. Also, the barrel key actually folds into the fob for a compact, one-piece unit.

And, like all the non-CVO Touring models, the CVO trio checks in with narrow-profile primary covers and derby covers for increased rider leg clearance. New, too, are LED front turn signals for improved visibility and a sleeker appearance.

As usual, stereo components are upgraded tremendously on the CVO fleet, all of which feature the Boom! Box 6.5GT infotainment system with 3D GPS. The CVO Limited and CVO Road Glide Ultra use four 6-1/2" Boom! Bagger speakers with a total of 75 watts per channel of amplification. The CVO Street Glide has the same speaker setup, but an additional 300-watt amplifier is added to the mix, virtually doubling the sound capacity of the other CVO models. For those of you who are math challenged, that also equates to being six times more powerful than the base two-speaker Street Glide. The Street Glide also gets an added dose of individuality with its multiple wheel and engine colors. Ordering the Black Licorice or Atomic Red paint options gets you a granite and chrome engine and chrome Aggressor wheels. The Carbon Crystal and White Amethyst paint schemes come with a blacked-out engine and Contrast Chrome Aggressor wheels. Meanwhile, the Road Glide Ultra's engine is only powdercoated black

with chrome covers and the Limited only has a granite powdercoated engine. Also, the Limited and Ultra get a Ventilator intake with a carbon fiber SE 110 insert and rain sock, and the Street Glide receives a little extra flair: a SE medallion and two carbon fiber-style

inserts.

The 2016 model lineup clearly shows how The Motor Company listens to its customers. New models and feature updates to current models reflect what owners like you seek in a motorcycle. No, make that in a Harley-Davidson motorcycle: a high-performance cruiser without the CVO price tag — check! A Road Glide Ultra — check! TPMS and electronically locking luggage — check!

The accompanying pages include our annual technical specifications guide for each new Big Twin model. But our 2016 H-D saga doesn't end here; check back next month for the full scoop on the 2016 Sportsters, Street, V-Rods, and Trike. Sportster enthusiasts, especially, are in for a treat! Also, as is the standard here at *American Iron Magazine*, we'll be running a 2016 Harley-Davidson new bike review in every issue through the coming year, so stay tuned for more on your favorite new Harleys. **AIM**





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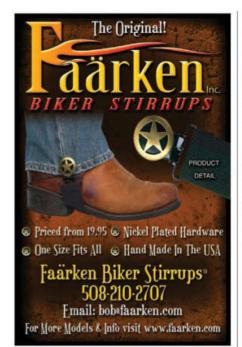
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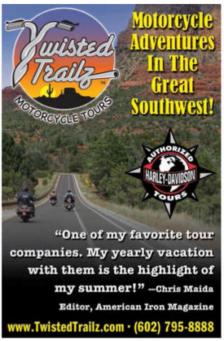


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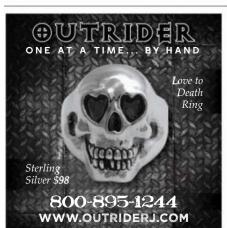
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Joe Piccioni sent in this 1961-62 photo of his mother sitting on a full dressed 1961-62 Panhead in Hyattsville, Maryland. He tells us that she took her first ride on a bike when she was 20 and was on the back of Joe's Sportster just last year. Joe also says he's been riding since he was 14. His first bike was a 1946 Cushman. The next one was a 1949 Pan that he bought for \$300; he chopped it when he was 18. **JOE PICCIONI** Orange Park, FL



Tracey Griggs sent in this pic of his great uncle Leo Nelsen on his 1954 Panhead. The other pic shows his great aunt Nellie and "my grams Gladys" with the bike and Leo standing off to the side and rear. Tracev tells us that he has been into the biker lifestyle since 1977. He also writes that "I stopped by for a visit and my aunt handed me these and just smiled."

TRACEY GRIGGS Canten, IL



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